Strengthening the Market Information Service in Uganda

Report of Stakeholders' Meeting

Compiled by Shaun Ferris and Peter Robbins

Footnet
Marketing and Postharvest Research in Eastern and Central Africa

International Institute of Tropical Agriculture

Commodity Marketing Information Service

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Report of Stakeholders' Meeting held at
American Recreation Association, Kampala, 1 December 1999
Kyotera Milano Hall, Rakai District, 2 December 1999

International Institute of Tropical Agriculture
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Executive summary

Following an extensive market reform package, in which the Government controlled commodity marketing boards were privatized, the Government of Uganda is now embarking on a Plan to Modernise Agriculture (PMA) (Ministry of Finance 1999). A major component of this plan is to support the establishment of a decentralized market information service, which aims to support the fledgling commercial sector.

The International Institute of Tropical Agriculture (IITA) has established the first phase of a market information service, which has replaced the useful functions of the now defunct government service. This project will provide information needed by planners in government and development agencies, including agencies dealing with food security. IITA wishes to expand the scope of this service, however, to collect and disseminate information that is relevant and useful to the millions of other actors in Ugandan agriculture. Since the liberalization of agricultural commodity markets in the early 1990s, the function of the state-controlled marketing boards has been taken over by private traders. Whilst this move towards a more "free trade" economic environment represents a positive move, the marketing system in Uganda remains highly inefficient.

A preliminary study on maize marketing in Uganda, (Robbins and Ferris 1999) revealed that agricultural markets in Uganda are characterized by long chains of transactions between farm gate and consumers, lack of competitiveness between traders, collusion at all levels of trading, and poor access to appropriate market information. Prices received by farmers for the sale of their goods are significantly less than the price they could have achieved if they had the means of transporting it themselves to assembly markets even after taking the cost of transport into account.

This first study has concluded that, if farmers were more fully informed about the markets for their crops, their bargaining position with intermediate traders would be strengthened, their income would increase, and less produce would go to waste. In addition, more transparent markets would help to lower transaction costs, increase the volume of trade, offer greater food security, increase import substitution, and lower consumer prices leading to greater benefits for Ugandan traders and processors and the economy as a whole. These views are supported by two independent studies in the region conducted by the Natural Resources Institute (UK) (Kleih et al. 1999).

At present there is no service providing timely and relevant information needed by the many millions of actors in the Ugandan agricultural sector. However, the necessary institutional resources, communication systems, economic environment, and legal framework to allow such a service to bring positive benefits exist.

Before this study was carried out, IITA decided that, in order to gain the necessary experience to initiate a countrywide market information service, it would first establish a pilot project targeting actors in the maize market in one location in Uganda. The findings of the second market study by Robbins and Ferris (2000) showed, however, that no agricultural commodity can be considered in isolation in the context of Ugandan production and marketing systems. It was also clear that farmers in specific parts of Uganda

differed markedly in their ability to make use of market information. It was therefore proposed that a limited number of pilot projects be established to target groups of producers, traders, and processors in more than one location and cover one or more commodities as well as maize. The design phase of this project began with the two stakeholders' meetings reported in this document.

In addition to providing support to the Ugandan marketing system, the studies also investigated the needs and capacity of developing a more regionally integrated marketing information system. As suggested by a recent report by (Boyd et al. 1999), there is considerable interest from the informal and formal private sector in developing stronger regional marketing linkages. The recently signed treaty to reestablish the East African Community in 1999 also indicates the interest of Government to capitalize on increased levels of regional cooperation and trade.

The debate on regional trade information revealed there is already considerable capacity in the region to collate and analyze market information at the national level and this national data could be collated and analyzed for the benefit of the region. Despite interest in developing a regional system for marketing information from both the private sector and donors, no agencies have emerged to take on this role. It was therefore proposed that IITA could initiate a program to develop this capacity in collaboration with the national marketing services from the region. IITA already has a website, which is providing regional price data and the IITA–Foodnet project is working with a number of partners in the region who are providing trade information. It was agreed at the meeting that partners in Kenya, Rwanda, Tanzania, and Uganda would set in motion the framework to strengthen linkages for regional marketing information and work towards a regional marketing service.

Purpose of the meetings

The first objective of the Kampala meeting was to familiarize participants with the potential benefits of establishing a service to provide information about the markets of agricultural products to farmers, processors, traders, government agencies, and development agencies involved in trying to improve agricultural performance within a liberalized market.

The second objective was to encourage participation of all organizations in the public and private sectors together with development agencies and NGOs in building a comprehensive market information service to serve both the national and regional agricultural sectors (for list of participants see Annex 2).

The third objective was to ascertain capacity and interest in developing regional links for market information.

The fourth objective was to take the ideas from the Kampala meeting and discuss marketing needs with farmers and an NGO working on community development through strengthening farmers' associations and primarily collective marketing.

Stakeholders' meeting—Kampala, 1 December

Developing the marketing information system

Task 1. Participants to familiarize themselves with the importance of market information to improve transparency within the markets and reduce transaction costs, with the view to increasing both food security and levels of market trading.

Task 2. Harmonize ideas on the type of marketing information required by small-scale stakeholders in Ugandan agriculture.

Task 3. Agree on the methods of collecting and disseminating this information.

Task 4. Offer suggestions on how such market information services should be managed with full participation by stakeholders.

Task 5. Discuss ways in which this service can be sustained in the long term.

Task 6. Discuss proposals to integrate a Ugandan market information service into a regional and international information network.

Farmers' perspective meeting—Rakai, 2 December

Linking market information with farmer's organizations

The purpose of the Rakai meeting was to take the ideas from the previous meeting in Kampala and discuss the relevance of these ideas with the farmers' associations and the coordinator of the Irish Foundation for Co-operative Development (see list of participants Annex 3).

Session I

Introduction to marketing systems in Uganda

A review of market information systems in Africa

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The principal objective of most African farmers is to feed themselves and their families and to sell any surplus production to pay for household utensils, farm inputs, medicines, and education for their children. These surpluses not only feed the rest of the nation but also represent the bulk of most African countries' export earnings. Anything that can be done to reduce the considerable cost and difficulties of linking producers with their ultimate customers must form a central feature of any development strategy for Africa. Programs for building new roads and providing trucks and storage facilities are being implemented as fast as limited government expenditure and development budgets allow. The provision of accurate, timely, and appropriate information, which would enable stakeholders to make better decisions about what to produce and where to sell it, is obviously equally important.

Over the last twenty years, most African countries have embarked on programs to liberalize their economies. This process has typically involved encouraging exports, investment, and competitiveness by reducing taxes, reducing import barriers, allowing the currency to become freely convertible (often involving devaluation), reducing public expenditure, and privatizing state-owned industries and services.

These programs have included the dismantling of marketing boards, which once set internal prices for buying and selling agricultural commodities. It was assumed that once this had happened, a competitive free market system would quickly evolve in which prices would be determined by the forces of supply and demand. Unfortunately, this has not happened in most African countries for several reasons. There has been very little tradition or experience of free market systems. The small number of adequately financed trading companies and lack of legal constraints means that traders are able to collude with each other to fix commodity prices. Poor suppliers and consumers are unable to travel to areas where they may get a better bargain. Suppliers and consumers often have no means of finding out the true market prices of commodities.

It was quickly recognized that actors in the agricultural commodity markets would need to be provided with information about those markets to assist with the process of making markets more transparent and competitive. For this reason almost every African country established a market information service. Typically, such services were funded by outside donors and run by the Ministry of Agriculture. Prices were collected from markets throughout the country and disseminated by radio.

In practice, nearly all of these services have been of little use to ordinary farmers, traders, and consumers. Their main use has been to supply other government agencies with data needed for monitoring food security and inflation and in planning programs to

improve agriculture and other aspects of the economy. Almost all of these services have become overbureaucratic, expensive, and inefficient. The information is not supplied in the appropriate languages, it is out of date by the time it has been collected, processed, and disseminated, and it is of little relevance to most potential beneficiaries. As these services have become less useful, donors have withdrawn support and several services have collapsed (Robbins 1999).

The problem of lack of information remains, however. In Uganda, the problem is particularly acute. Ninety percent of the population is engaged in agriculture and 90% of exports are agricultural products. Since the government's Market News Service ceased in May this year, however, most Ugandans have no access to market information (Robbins and Ferris 1999).

In the next session, our ideas for establishing a new model of a market information service will be discussed, in keeping with the needs of the trade sector and also in support of the Government of Uganda's Plan for the Modernisation of Agriculture, (Ministry of Finance 1999). But first we should think about the reason for trying to do this. What benefits can market information bring?

In theory market information can:

- strengthen farmers' bargaining position
- lower transaction costs
- match supply with demand
- lower waste
- increase the volume of trade
- increase market transparency
- encourage overseas buyers
- strengthen food security
- assist government planning
- boost the national economy.

Researchers have shown that increased availability of market information can provide all of these benefits but the degree to which these market benefits occur depends upon certain prerequisites, as outlined in the Community Access to Marketing Opportunities in Uganda by Kleih et al. (1999).

Firstly, there needs to be the necessary legislative framework, which will enable actors in the market to make use of the information. In addition, isolated farmers and small-scale traders must have access to more than one trader or market and it helps if they can obtain credit at reasonable rates of interest. Producers must also be able to switch cropping patterns if they are to make maximum use of the information provided. These prerequisites exist in Uganda but vary from place to place and according to the way farmers and traders manage their businesses. Our next job is to discover the best way to provide information, within our resource capability, to maximize its benefits.

The role of market information within the Plan for the Modernisation of Agriculture (PMA) in Uganda

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Background to PMA

Poverty focus of PMA

The PMA is firmly rooted in the policy for the eradication of absolute poverty (PEAP), which aims to eradicate mass poverty by the year 2017. The PMA aims to implement a number of key institutional, policy, and investment programs in order to make the agricultural sector grow differently from the past and contribute more fully towards poverty eradication in Uganda. The transformation of the sector is intended to be broad based and the aim of the new policy is to bring within the reach of a large proportion of the country's resource-poor, smallholder farmers, the possibility of commercially profitable farm production.

The meaning of the modernization of agriculture

The phrase "modernization of agriculture" has different meanings for different people. For some it suggests specialization, to others it means commercialization with the adoption of new technologies and, particularly, the uptake of mechanized farming techniques. For some groups, modernization may take on a more radical view, which requires significant agrarian reforms including the consolidation of land to encourage the development of fewer, large-scale commercial farms. According to the Government of Uganda (GoU), the modernization of agriculture in the near future is related to a shift from subsistence production to commercial production. Simply put, it means not only producing for household consumption but also producing surpluses for sale into the market and according to the PMA, one of the key elements in bringing about this change is the provision of market information. Hence, the GoU is aware of the importance of this workshop, which is focusing on finding ways of improving access to marketing information. However, having emphasized this short-term view of the Government, it should also be stated that in the longer term, as the agricultural sector develops, it is assumed that the other factors including mechanization, consolidation, higher input methods, and more commercial management systems will come into play.

Why emphasize agriculture?

Experience worldwide has demonstrated that modernizing the agricultural sector is one of the quickest means to transform a subsistence-based agrarian economy into a more vibrant, multisector, market-led economic system. As part of this process mass poverty

is reduced because of many linkages and multiplier effects agriculture has with other sectors. This argument can be supported through the following points:

- The main engine of growth has to come from technological progress through the introduction of new techniques, which increase factor productivity. This has the dual effect of decreasing the cost of production per unit output and increasing output per unit input.
- The higher incomes arising from the above, increase household incomes whose increased expenditures in nonfarm outputs stimulates nonagricultural growth and this increases national income from other sectors of the economy.
- The technological changes enable the agricultural sector to produce more food and allow food prices to decline. However, it is possible for farmers to absorb lower food prices because the cost of production per unit output will have declined. Thus, lower food prices in turn lead to a fall in poverty level and so directly improves the real incomes of all the poor including those in urban areas where there is no direct production of food.
- Declining food prices may improve the terms of trade for manufacturing industry and lower real wage expenditure, which should stimulate more labor-intensive industrialization.
- Lower food prices stimulate the growth of labor-intensive exports across all sectors of the economy and therefore, higher rates of economic growth. The large contribution of the agricultural sector to foreign exchange earnings has a significant contribution for financing imports.
- Improved productivity improves the linkages between the agricultural and nonagricultural sectors of the economy through improved intersector movements of labor and capital and also the surplus generated by agricultural growth contributes to expanding investments in the whole economy.
- Modernization of agriculture will lead to rural development, as it will entail investments in rural infrastructure especially feeder roads, telephones, rural electrification, market development, post offices, schools, rural health services, agricultural research stations, etc. These investments improve the terms of trade in rural areas.
- Modernization of agriculture would also entail land reforms, which would provide security of property rights, develop land markets, and increase efficient utilization of land and investments.

The key areas of intervention

In the design of the PMA, twelve key thematic areas were identified for developing the strategic framework for implementation. These areas include:

- vision and strategic purpose
- agricultural research and development
- agricultural extension and education
- rural financial services
- institutional reforms and adjustments

- private-sector involvement
- agroprocessing and marketing water for production
- forestry
- environmental issues
- gender issues
- resource development.

What *is* new in the PMA? To answer this question, we need to discuss the issues below:

Comprehensive development framework (CDF)

The PMA will be implemented within the CDF process, which aims to modernize Uganda and transform its society, thereby eradicating mass poverty by the year 2017. In the past, Uganda Government's development plans were based on implementation of a series of discrete projects. This approach had several weaknesses.

- It fostered a piece-meal approach as opposed to a comprehensive, sector wide investment program.
- It was largely donor driven and lacked domestic ownership and sustainability.
- It lacked adequate coordination among the various stakeholders, resulting in duplication of efforts and inappropriate sequencing of project implementation.

To address these shortcomings, Government has recently adopted a strategy which may described as a shift from a project-driven approach to the development of more comprehensive sector wide programs and investment plans, involving the participation of all stakeholders in a genuine partnership. PMA has been designed as part of this effort.

Role of government versus the private sector

The transformation in the agricultural sector will be spearheaded by the private sector. Government will work in partnership with the private sector but its role will be largely confined to setting policies and removing constraints to private-sector activities as well as financing provision of services with "public good" content.

Institutional adjustments

PMA will be implemented within the context of decentralization whereby actual implementation of programs will be delegated to local authorities. In this regard, the planning and implementation of the programs will take place in a consultative manner and must be inclusive of the key actors. In order for this to take place, a number of critical institutional adjustments will be made at the national, district, and community levels. These include the creation of agricultural research and development centers (ARDCs) (at the zonal level); agricultural development centers (ADCs) (at the district level); and technology development centers (TDCs) (at the community level) for strengthening research–extension–farmer linkages.

Coordination

PMA will be implemented on a sector wide basis involving several ministries, agencies, donors, and the private sector. To ensure harmonious implementation, there will be a need for vertical coordination with sectors and horizontal coordination across sectors. In addition, strong linkages will be required from the center with district agencies as well as subdistrict level agencies.

Funding

Resource flows to end-users and accountability of funds spent have been major problems in the past. One of the key challenges under the PMA is to develop and monitor a program of transparent and effective funding strategies for the activities envisaged.

Market information within the context of the PMA

Improved market access

Improved marketing or access to markets is absolutely critical to the success of the PMA for which the main focus is increased commercial agricultural production. Market access means that the key players in the marketing chain, including farmers, have sufficient information and the physical, financial as well as social means to purchase inputs and sell agricultural produce on favorable terms. In the context of PMA, therefore, improving market access must be approached in a holistic manner as there are several determinants of market access (Figure 1) and no single intervention measure is likely to yield positive results. Also both the public and private sectors have critical roles to play.

Market information

The need for effective market information for improving market access is absolutely crucial. It is also clear that the different types of stakeholders require many different types of information on a timely basis in order to make informed decisions crucial for the success of their business operations. A market study conducted by the Natural Resources Institute (NRI) in the UK in collaboration with the Agricultural Policy Secretariat (APSEC), demonstrated that the majority of stakeholders in Uganda are of the view that apart from the road network, the second major constraint to marketing in this country is lack of market information (Table 1) (Kleih et al. 1999). Based on the same study, a decentralized, flexible information system bringing on board all the main stakeholders, e.g., local government, private-sector associations, NGOs, local radio stations etc., into the design, management, and funding of such a system, is being recommended for implementation under PMA. It is also recognized that Government (central and local authorities), donors, and NGOs have to acknowledge the importance of information and make the necessary resources available particularly in regard to providing information to poor farmers where such services may be viewed as a public good. It is envisaged that such a system will need to be demand driven and responsive to the needs of the target population. Local radios could be one of the principle means of disseminating such information. It is also envisaged that such a system would have an arrangement for networking with other domestic and international information systems.

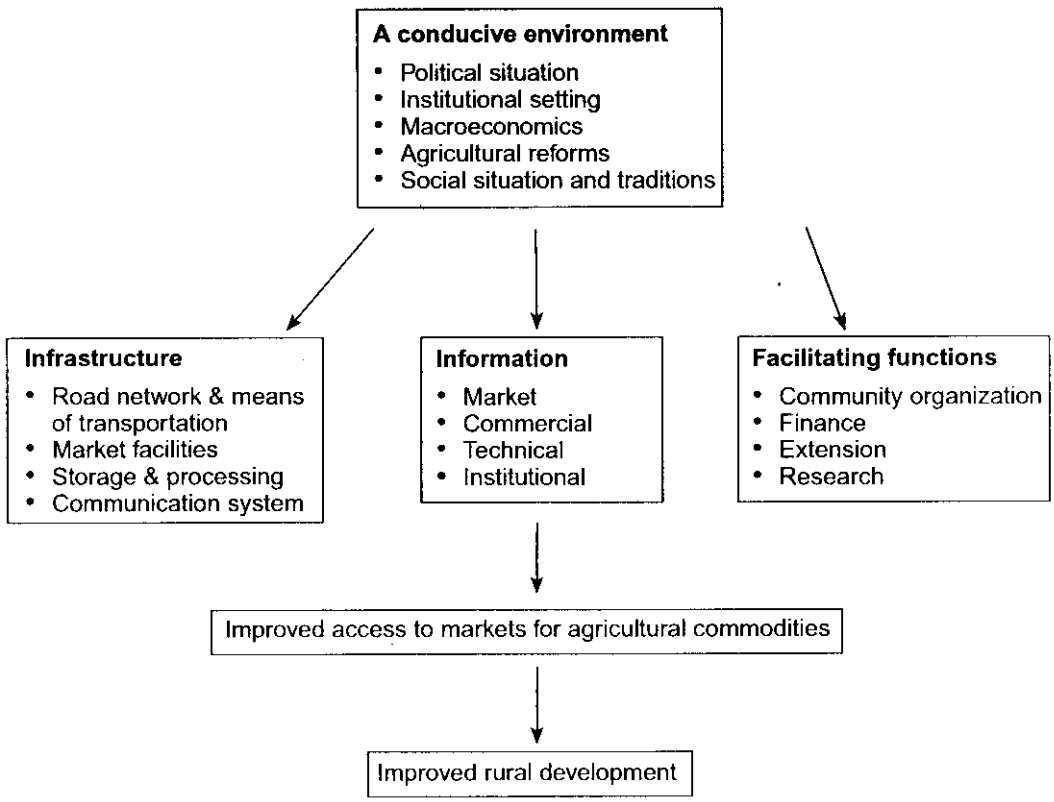

Figure 1. Determinants of market access and their linkages.

Table 1. Ranked constraints to marketing of agricultural commodities in five districts of Uganda (August 1999).

Constraints	Districts					Overall proportion
	Kibale	Lira	Kapchorwa	Rukungiri	Katakwi	
1 Poor roads/network	1(14)	1(9)	2(12)	1(10)	6(5)	14%
2 Inadequate market information	2(11)	2(8)	1(13)	5(7)	4(6)	13%
3 Poor means of transport	3(8)	11(1)	5(5)	5(7)	1(13)	9%
4 Inaccessibility of credit	–	–	16(1)	11(3)	2(12)	6%
5 Lack and/or cost of inputs	6(4)	–	3(8)	7(6)	14(1)	5%
6 Inadequate and poor storage	9(2)	4(5)	5(5)	13(2)	7(3)	5%
7 Poor market infrastructure		8(3)	8(3)	10(4)	4(6)	4%
8 Weak farmer organization/ mobilization	7(3)	–	16(1)	9(5)	11(2)	3%
9 Inadequate extension services	3(8)	–	10(2)	–	–	3%
10 Inadequate processing services	–	7(4)	–	17(1)	7(3)	3%
11 Government policy	–	–	–	–	–	0%

Figures outside brackets represent ranks of constraints at district workshops. Figures in brackets represent scores. Overall proportions do not add up to 100% because constraints not related to market access were omitted.

Source: Adapted from community access to marketing opportunities: options for remote areas—Uganda case study (APSEC/NRI 1999).

The role of market information in food security analysis

Andrew Mutenga

Famine Early Warning System (FEWS), Uganda

What is FEWS?

The US Agency for International Development's (USAID) Famine Early Warning System (FEWS) is an information system designed to help decision makers prevent hunger and famine in sub-Saharan Africa. FEWS specialists in the United States and Africa assess remotely sensed data and ground-based meteorological, crop, commodity price, and range land conditions for early indications of potential famine areas. Other factors affecting local food availability and access are also carefully evaluated to identify vulnerable population groups requiring assistance. These assessments are continuously updated and disseminated to provide decision makers with the most timely and accurate information available.

Why FEWS Uganda?

Development and food security

Uganda's export-led development strategy promotes the increased production and use of both high- and low-value agricultural commodities. FEWS Uganda fosters this strategy by monitoring internal food security and providing information to decision makers on the relationship between agricultural production, household food security, and exports. The intent of this effort is to help the Government of Uganda (GoU) maintain internal food security, while increasing agricultural exports.

Relief and development

Appropriate famine preparedness and mitigation strategies can lead, over the long term, to reduced famine risks, increased incomes, and economic growth. FEWS deliberately seeks to reinforce the conceptual and operational links between relief and development efforts. The project provides an information bridge between partners at all levels and at both ends of the relief–development continuum.

The FEWS approach

FEWS monitors areas of high risk where populations are particularly vulnerable to episodic food shortages that could lead to famine. Early warnings provided by FEWS enable decision makers to assess famine threats and plan required food assistance well in advance.

FEWS information helps decision makers to:

- Improve understanding of the basic causes and circumstances of famine.
- Detect changes that create serious famine risks.
- Determine appropriate famine mitigation and prevention strategies.

The project integrates a diverse variety of data and information into a clear and concise form that is useful for decision makers.

Biophysical

- Remote sensing
- Rainfall
- Crop growth
- Crop production
- Animal health
- Animal production

Socioeconomic

- Market supply/demand
- Food prices
- School attendance
- Household income

Demographic

- Population
- Employment

Health and nutrition

- Growth monitoring
- Malnutrition

FEWS products and services

FEWS offers a full range of tools and services designed to provide decision makers with up-to-date information on the food security status within the country, subregion, and continent.

Vulnerability updates and bulletins

Vulnerability updates are distributed monthly to all interested users of FEWS information in Uganda. FEWS analysts closely monitor early warning signals such as sudden, sharp increases in market prices, as this typically indicates an unusual, unplanned demand for food. The *FEWS Bulletin* has a much wider distribution as it provides early warning information on all FEWS countries in sub-Saharan Africa.

Vulnerability assessments

Periodic bulletin supplements identify local populations that are vulnerable to famine and provide insight into the root causes of vulnerability.

World Wide Web

Many FEWS publications are distributed through USAID's World Wide Web site at: http://www.info.usaid.gov/fews/fews.html

Food security updates and briefings

Regular and ad hoc updates and briefings provide Ugandan decision makers, USAID, and other groups with the latest information on potential food security threats. In Kampala, the information used in the food security updates is also used in the trade bulletins (see next section), which provides an overview of food security and also trade prospects.

Data dissemination and analysis

Remotely sensed and ground-based early warning data are collected, analyzed, and disseminated on an ongoing basis.

Capacity development

While FEWS Uganda is not a donor, it works with the National Early Warning and Information System (Ministry of Agriculture, Animal Industry and Fisheries) to improve methodological approaches, analysis, and information dissemination.

Cooperation and methodology improvement

FEWS collaborates with the GoU, USAID, Uganda, the Food and Agriculture Organization (FAO) of the UN, the World Food Program (WFP), and other UN agencies and NGOs to improve early warning and vulnerability analysis methodologies.

Constraints to the FEWS system of analysis

FEWS uses a convergence of information approach for food security analysis, using various types of data to identify and confirm vulnerable communities. However, FEWS does not collect primary data, and therefore analyses are based on secondary information. The accuracy of the analyses is therefore very much dependent upon the quality of data being provided by partners who work with the FEWS team.

In Uganda, there is a lack of reliable data for several of the more important agricultural indices, particularly for crop production figures and animal stocks. The last agricultural census was taken more than 8 years ago and since that time, all production figures have been estimated with no means of verification. FEWS is also aware that some official data sets are prone to being manipulated in response to certain government policies or desires and other official data sets are not used simply due to lack of confidence in the figures. Therefore, access to an independent source of accurate, timely, and cost-effective price information is invaluable to the FEWS project. Having access to the information means that FEWS has more confidence in its predictive ability and is therefore in a far better position to monitor the food security status of the more vulnerable communities in Uganda and conduct a more detailed analysis of the causal factors leading to food deficit problems (see Annex 4 for more details).

The Agri-business center's "IDEA project" support to marketing news

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IDEA Project

Overview of IDEA project

Uganda's investment in developing export agriculture (IDEA) project is a key activity contributing to US Agency for International Development's (USAID) primary strategic objective, namely, "increasing rural household income." IDEA's project goal is to attain higher household incomes through the development of market opportunities for selected nontraditional agricultural exports (NTAEs). The IDEA strategy is to enhance market access by providing direct assistance to producers, traders, and exporters of NTAEs using a vertically integrated, "commodity systems" approach. Both high- and low-value commodity systems are being tackled and the IDEA team works to expand low-value food crop exports (primarily maize, and beans); and increase production and exports of high-value crops (such as flowers, vegetables, spices, and essential oils).

IDEA has six operational components to accomplish the project outputs, and a project management component. The low- and high-value production and marketing components form the cornerstones of IDEA, and are supported by the five other components, which provide essential technical assistance, training, and management services. The seven components are:

1. Low-value crop export development.
2. High-value crop export development.
3. Business and finance.
4. Strengthening of associations.
5. Education and training.
6. Monitoring and evaluation.
7. Project management.

The low-value component aims to promote the production and marketing of field crops, primarily maize and beans. Over the years, the strategy adopted for increasing output and marketing of maize and beans has evolved into 5 areas of activity: research, technology transfer, input supply, output marketing, and commercial farming. In previous years, greater emphasis was placed on encouraging private-sector investment in all aspects of the production–marketing continuum. To build on this success, the component is looking forward to working with the commercial subsector with a view to realizing surplus volumes for both the internal and regional markets.

There are many implementers and collaborators for the IDEA project. They include USAID, the IDEA steering committee (ISC), the Government of Uganda (GoU) (through the Ministry of Trade, Tourism, and Industry, Ministry of

Agriculture, Animal Industries and Fisheries), institutions such as Makerere University and the National Agricultural Research Organisation (NARO), NGOs, ACDI/VOCA (Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance), other projects such as FEWS, PL-480, Postharvest handling project, and the private sector. Although the basic project agreement is between USAID and the GoU's Ministry of Trade and Industry, IDEA operates principally for and in concert with the NTAE private sector. Thus ISC is made up largely of private-sector representatives and a few representatives of ministries and parastatal entities involved in promoting the NTAE sector in Uganda.

One of the main aims of the project is to provide technical support to the sector in terms of market and trade news. The IDEA project was producing the trade information bulletin every month for the lower value crops, in collaboration with FEWS. However, this was stopped when the Government service ceased to function in early 1999. This service has recently been reestablished with the information being supplied by the Marketing Information Service from IITA–Foodnet. Annex 4 (Trade forecasting bulletin) provides an excellent example of how to merge price data, trade information, and weather data to provide an opportunity guide to specific markets in the region.

The IITA–Foodnet's macro-scale marketing information service in Uganda

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The IITA–Foodnet project started collecting commodity price data in January 1998, specifically for cassava and cassava-based products. This information was required as part of the postharvest research within a national cassava rehabilitation project. Information on cassava, the most important food security crop in Uganda, was not collected by the Government services and therefore a dedicated price monitoring system was put in place. As cassava is not produced or sold in isolation, market prices for 17 competitive or complementary commodities were also monitored at farm gate, wholesale, and retail prices on a monthly basis in 13 districts, in the main cassava producing areas of Uganda, i.e., those districts surrounding Lake Kyoga. The aim of this work was to provide an economic framework for the development and testing of new cassava-based agricultural technologies and products.

The need for cassava market information was based on the requirement to find new market opportunities for the rising levels of cassava being produced by farmers. In the late 1980s, a new and virulent form of the cassava mosaic disease decimated cassava production in Uganda and lack of cassava led to several cases of famine. Fortunately by the mid-1990s, cassava production was showing rapid growth again as a result of the introduction and mass dissemination of new, higher yielding cassava varieties, which were resistant to the mosaic disease. As the effect of the mass distribution of the new cassava varieties was translated into higher yields, prices for cassava products fell dramatically. The results were that although the farming communities regained food security, local markets were not able to absorb the crop surpluses. The effect was that many farmers refused to harvest their fields. The implication was that farmers would not take advantage of the higher yield potential of the new varieties, but would simply return to low-subsistence production levels. To avoid the situation where farmers are unable to market more than just a small surplus, the cassava project set out to finds ways of improving the marketing efficiency of cassava, and worked towards assisting farmers access new market opportunities. The aim was to provide farmers and traders with the type of market information they needed to develop strategies and improve their market access.

The problem of poor market access is common to many crops in Uganda. Farmers are able to produce crops, but they have problems in finding markets to absorb their produce at a competitive price. The first tasks for the market information service was to ascertain (i) what types of information farmers and traders already have, (ii) what types of information they need, and (iii) how to deliver that information.

In a recent survey conducted by IITA (unpublished), most farmers indicated they were able to obtain some form of market information (61%) and that farmers considered

prices to be the most useful form of information (90%). Further explanation revealed that farmers had a reasonable idea of which crops were in demand (54%) but only a vague idea of price trends (7%), even in their local market and market information was mainly gained through neighbors (74%). Nearly 20% of farmers had no access to market information and only a limited number of farmers were able to access information through sources such as radio and cooperatives. No farmers obtained information from newspapers (Fig. 2). There have been some attempts from other NGOs such as the Ugandan National Farmers Association (UNFA) to provide information on input costs and commodity prices, but these bulletins have usually been outdated after the timelag for publication and distribution (UNFA 1999).

Improving market access

One of the underlying problems with improving market access is that if farmers are to bulk their harvests and to make more effective trading decisions, they need to be well informed about the market. Farmers need to have a good knowledge about their production costs, the types of inputs they need, varieties in demand, market prices, commodity standards, names or contacts for buyers, and some idea of market options. Specific types of market, whether local, regional, or export, also require specific types of inputs and these include a combination of (i) technology inputs, such as variety, water, and fertilizer and (ii) marketing information inputs such as when is the best time to sell, what are the prices, price trends, who is offering the best prices or demanding highest volume, and what are the likely future production trends.

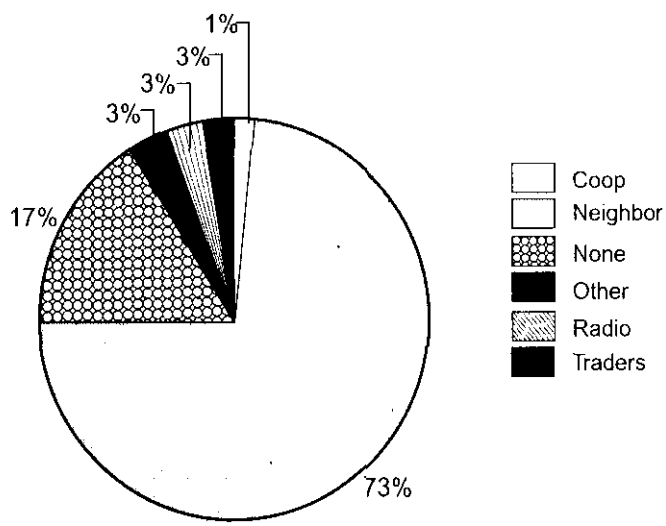


Figure 2. Farmer's sources of market information.

A conceptual diagram (Figure 3) shows some of the inputs that are required for the various market types. The information basically indicates that as farmers access more lucrative markets, there is a greater need for more sophisticated market information. The same conceptual framework is shown in Figure 4, and this diagram indicates the situation that prevails in much of Africa, in that not only do most farmers have no physical farm inputs, such as seed or fertilizer, they also have no market information to assist them in making the transition from subsistence to higher levels of marketing their produce. The information gap shown in Figure 4, means that many farmers are resigned to the subsistence farming system unless some effort is made to provide the very basics in marketing information and that farmers are unlikely to make the types of changes that are envisaged in the "Plan for the Modernisation of Agriculture" in Uganda unless efforts are made to provide farmers and farmers' associations with relevant market data.

Market information services in Uganda

In May 1999, the Marketing News Service of the Ministry of Trade and Industry ceased to function. In October 1999, the Foodnet project of the International Institute of Tropical Agriculture established the first phase of a market information service to rehabilitate the national commodity price service. The new service collects wholesale and retail data for 17 crop commodities, and 4 meat products in 17 markets across the country, on a weekly basis. The data is collected from the following urban centers: Kampala, Jinja, Kamuli, Iganga, Pallisa, Mbale, Soroti, Tororo, Kumi, Lira, Apac, Masindi, Gulu, Arua, Luwero, Mbarara, Rakai, Masaka, Kabale, Kasese. There are plans to extend this service to other market centers when supporting agencies working in these areas have been identified.

The data collection form (Fig. 5) provides cost data and some idea of the levels of demand, supply, quantities sold, and the comment section is used to describe any unusual events. In Kampala, the data collection is more intensive, gathering data for 27 commodities, at four sites, including the two major urban markets and some of the larger trading organizations, on a daily basis (Fig. 6).

In the initial phase of the new project, the aim is to make the data set more reliable and more accurate and provide timely data sets to clients. At present, the price data is analyzed and distributed in a format most useful for planning units in government, agricultural development programs such as IDEA, and food security systems such as FEWS.

The types of information that can be developed using the price data are shown in Table 2. These include, spot prices, i.e., "today's price for maize", temporal prices, and market trends as shown in Figure 7 and spatial type data sets as shown in Figure 8. In the near future, it is hoped that the market information system (MIS) will collect and provide information on volumes traded for specific commodities and also the types of standards commonly used in the key markets. Other types of information that will be developed include market options in terms of locality, product types, and market news, "what the traders are saying", and the regional perspective.

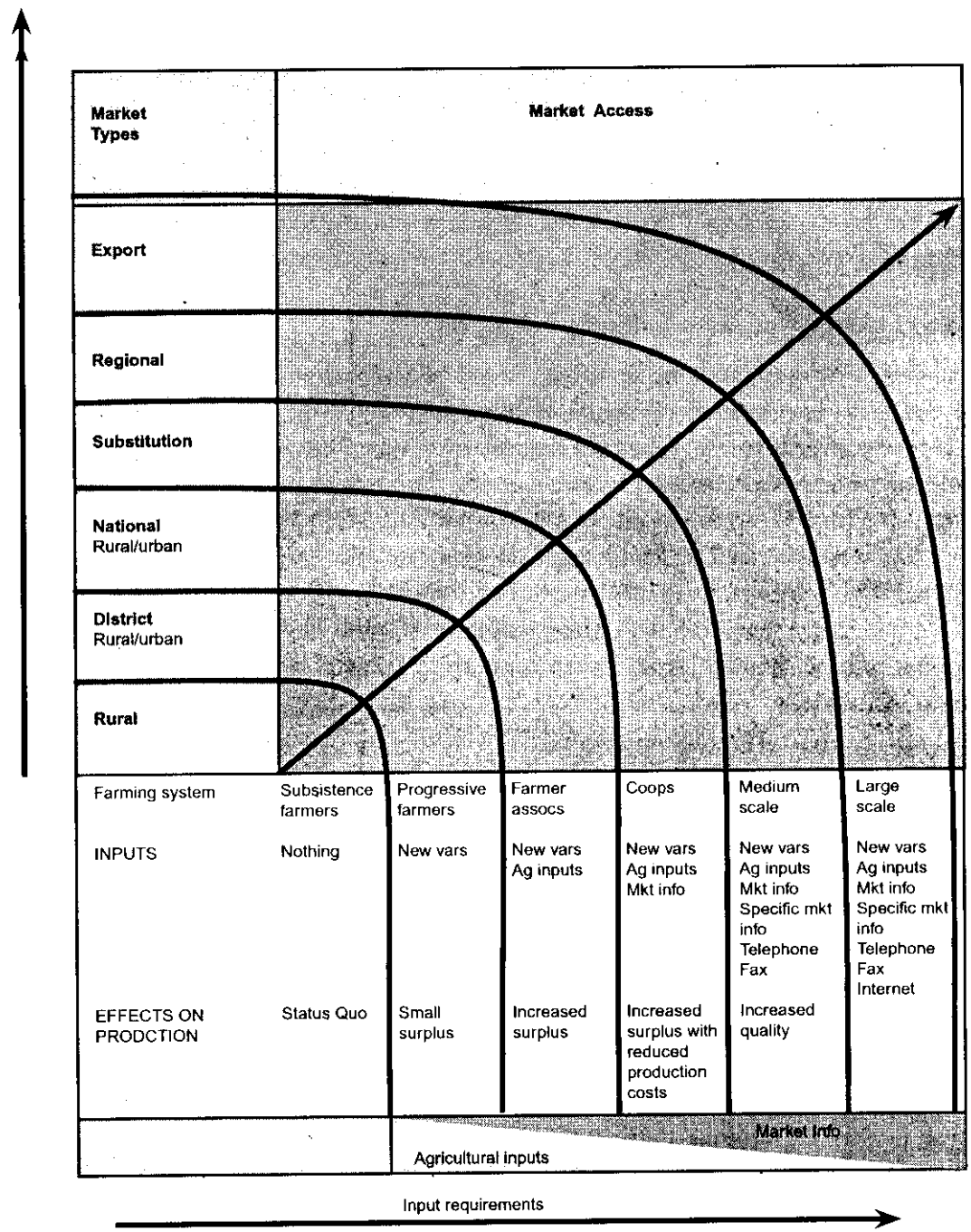


Figure 3. Conceptual analysis of market.

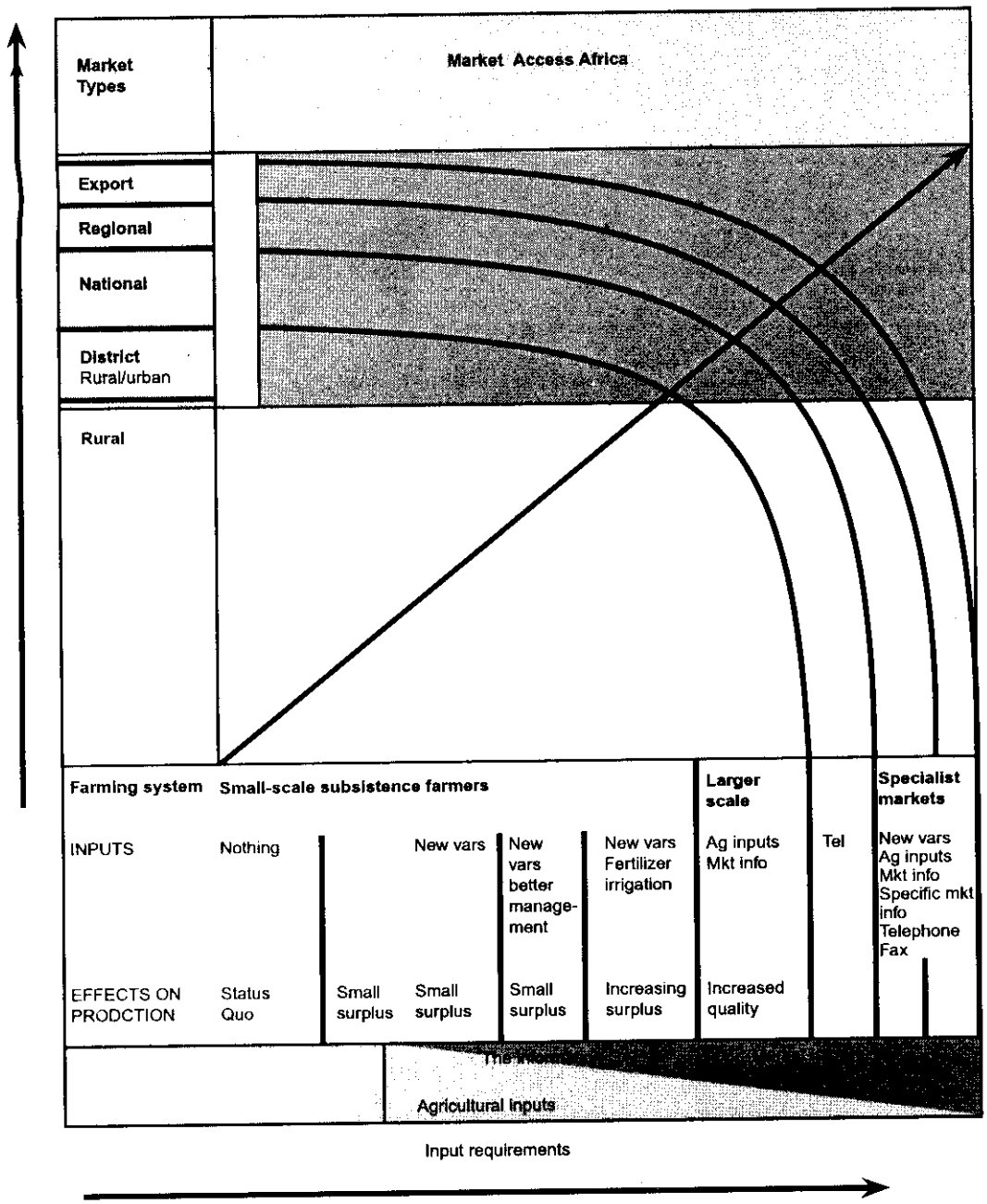


Figure 4. Conceptual analysis of market access in Africa.

Figure 5. Data collection form for weekly district level price information.

Name of collector: Oryem Charles
Date: 5/01/2000

Districts: Gulu
Market(s) covered: Municipal Main/Cere Lenu

Items	Wholesale prices Range	Wholesale prices Average price per kg	Consumer prices Range	Consumer prices Average price per kg	Remarks Demand	Supply	Quality	Price
Banana/matooke	400–500 =	450 =	500–600 =	550 =	A	C	B	A
Cassava fresh	30–60 =	50 =	50–80 =	70 =	C	A	A	C
Sweetpotatoes fresh	80–110 =	90 =	90–120 =	100 =	B	A	B	C
	Range	Most frequent price per kg	Range	Most frequent price per kg				
Beans	200–250 =	250 =	250–350 =	300 =	B	A	B	A
Beans (specify) (small)	100–170 =	150 =	150–220 =	200 =	A	A	B	C
Cassava chips	150–200 =	200 =	200–350 =	350 =	C	B	B	C
Cassava flour	400–500 =	450 =	500–600 =	550 =	C	B	B	B
C. Nuts	650–830 =	800 =	800–900 =	850 =	A	A	A	B
Maize grain	100–150 =	120 =	150–200 =	180 =	A	B	A	B
Maize flour	450–500 =	500 =	550–700 =	600 =	B	B	B	B
Millet grain	250–300 =	250 =	300–350 =	300 =	B	A	B	B
Millet flour	450–500 =	500 =	550–700 =	600 =	B	A	B	B
Rice	500–550 =	520 =	550–650 =	580 =	A	A	A	B
Sim sim	300–400 =	400 =	400–550 =	450 =	B	B	B	B
Sorghum grain	120–150 =	120 =	150–200 =	160 =	B	B	B	C
Sorghum flour	350–450 =	400 =	400–550 =	500 =	B	B	B	B
Soybean	200–250 =	250 =	250–320 =	300 =	A	C	B	B
Sunflower (black)	200–300 =	250 =	250–320 =	280 =	A	A	A	C
Cattle/beef	1600–2200 =	1800 =	1500–2000 =	2000 =	A	B	B	A
Chicken (live bird)	4000–5500 =	5500 =	5000–7000 =	6500 =	A	B	B	B
Goat/meat	1600–2200 =	1600 =	1800–2200 =	2000 =	B	B	B	B
Smoked fish	2000–3000 =	2500 =	3000–4000 =	3500 =	A	B	B	A

The appropriate box corresponding to an item under the caption head "Remarks" with the help of the codes below. Any additional information can be written on another paper. If faxed, please fax both papers.
Demand: (a) High (b) Moderate (c) Low (d) None; **Supply:** (a) Plenty (b) Moderate (c) Scarce; **Quality:** (a) High (b) Moderate (c) Poor; **Price:** (a) High/increasing (b) Moderate/constant (c) Low/declining

Other comments including weather:
With the festivities of Xmas still cooling most prices didn't show much increases over the week with most of the prices remaining stable. While the prices of cattle meat/goats remained stable the prices of chicken only exceptionally went up. Other price increases were noted for matooke, cassava fresh, sim sim, groundnuts, beans kanyebwa, and beans small. The prices of maize grains, cassava flour, and sorghum grains only dropped over the week. The prices of maize flour, cassava chips, millet grains, millet flour sorghum flour, sunflower, soya beans, sweet potatoes, cattle, goat, and smoked fish, however, remained stable. More price changes are yet expected as famers rush to sell off their produce as the situation in the rural areas worsens.

Market Information System, International Institute of Tropical Agriculture

Tel: 256-41-223460, 077-221162, 077-221164; Fax: (256-41)-223459; Email: mis@imul.com

Plot 7, Bandali Rise, Bugolobi.

Commodity prices for Kampala district—Monday, 22 November 1999 Shillings/kg.

		Kisenyi			Owino		
Class/group	*Crop*	*Off lorry*	*Wholesale*	*Retail*	*Off lorry*	*Wholesale*	*Retail*
Bulbs	Onions	–	–	–	600	700	800
Cereal	Maize flour	430	450	550	450	550	800
	Maize grain	280	300	350	300	320	350
	Millet flour	400	500	600	450	530	650
	Millet grain	360	380	400	350	450	500
	Rice threshed	600	700	800	600	700	800
	Sim sim	–	–	–	850	900	1000
	Sorghum beer	300	350	400	290	310	350
	Sorghum flour	220	250	300	290	300	350
	Sorghum food	200	220	250	200	250	300
Legumes	Beans large	280	300	400	270	300	400
	Beans medium	240	280	350	250	270	350
	Beans mixed	200	250	300	250	330	350
	Beans small	300	320	400	280	320	400
	Cowpeas	700	750	850	750	800	900
	G.Nuts	1200	1280	1300	1210	1250	1300
	Grams	400	450	500	400	500	600
	Soya	370	400	450	500	600	700
Others	Cocoa	–	–	–	–	–	–
	Ginger	–	–	–	200	230	250
	Sunflower	–	–	–	–	–	–
Plantain	Banana/matooke	–	–	–	320	420	550
Root/tubers	Cassava chips	250	280	350	260	290	300
	Cassava flour	280	350	400	300	350	450
	Cassava fresh	–	–	–	200	270	300
	Potato Irish	–	–	–	260	310	450
	Potato sweet	–	–	–	120	140	200

Figure 6. Price data from Kampala collected on a daily basis.

Table 2. Types of information and clients.

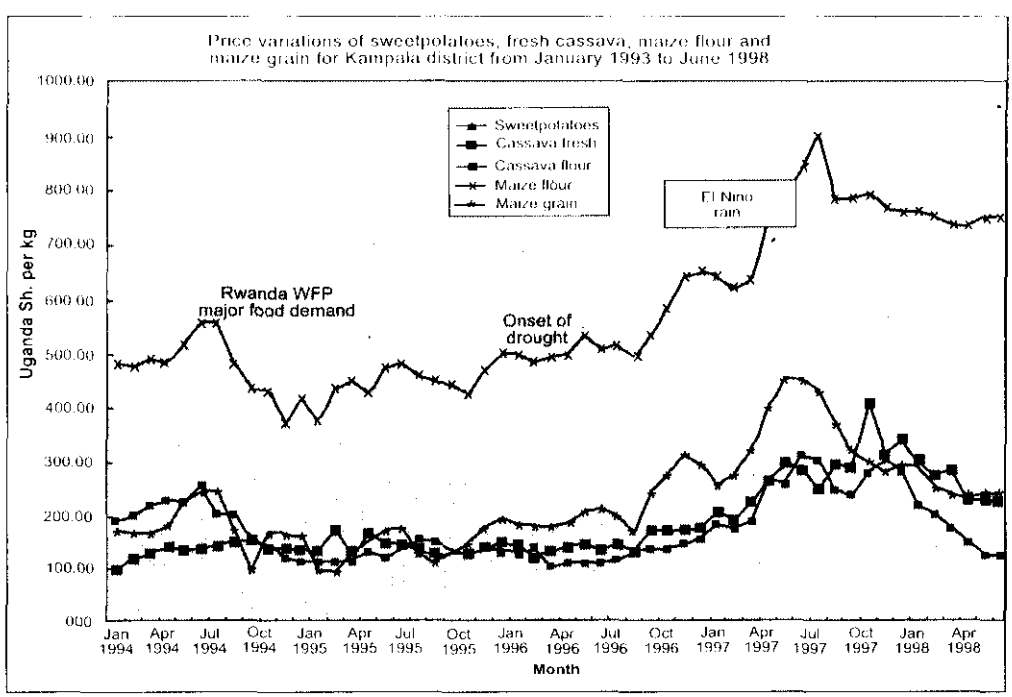
Types of information include	
• Temporal data	Market trends over short and long term
• Today's/spot prices	See daily price sheets
• Spatial data	Comparisons between locations
• Volume traded	Measure rate of trading
• Product quality	Price for a specific grade
• Product differentiation	Changes in product range and value
• News	Policy changes, tariffs, legal actions, traders losses and gains

Public sector clients for the commodity price information, at the macrolevel

- Ministry of Finance, Ministry of Trade and Industry, Ministry of Agriculture
- FEWS, USAID, Consultative Group on International Agricultural Research (CGIAR), NGOs
- Regional bodies including Association for Strengthening Agricultural Research in East and Central Africa (ASARECA), Intergovernmental Group Authority on Development (IGAD)

Private-sector clients for the commodity price information at the microlevel

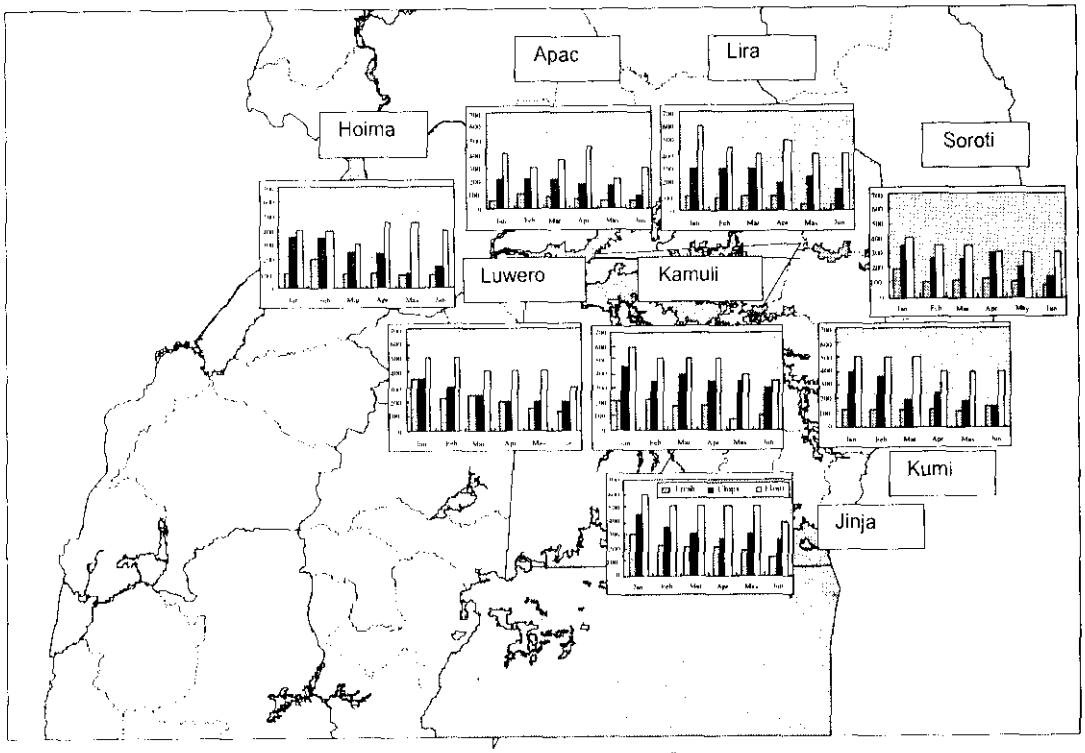
- Farmers
- Traders
- Processors
- Consumers
- Research organizations
- NGOs
- Extension



Source: Bureau of Statistics, Ministry of Finance.

Figure 7. Temporal market data.

Uganda consumer prices of fresh cassava, chips, and flour in shillings per kilogram for selected districts, 1998.



Legend applies for all graphs. Fresh cassava roots ... cassava chips ▓ cassava flour

Figure 8. Spatial market data.

The price information collected by the Foodnet MIS is already being fed into the trade bulletins provided by the IDEA/FEWS projects. Starting in the year 2000, the MIS project will be publishing Uganda price data in the regional East African Newspaper and is already developing radio programs which will cover trade news for broadcasting with local and national radio companies. The trade news will also be placed onto the Foodnet website, www.cgiar.org/foodnet in the first quarter of 2000. The problem, however, remains in that, although the service to the policy groups is improving rapidly, the service for the real market agents, i.e., the producers and buyers, requires considerably more effort and further support in terms of personnel to run the service and funds to enable the service to effectively meet the needs of the client groups at the micro-level.

Constraints to the service

Currently, the Foodnet MIS team is in the process of fine-tuning the data collation and analysis system and revising the recipient listing for the basic price information. The MIS project is also actively seeking support from radio and newspaper publications to disseminate this information to a wider audience. This has proven somewhat difficult as the media wish to charge full commercial rates for the provision of market information and therefore additional funding is required to effectively serve the producing and trading sector (CBS 1999).

Areas that need further improvement and support

- Lack of access to partners in the private sector.
- Poor communications with current and potential partners in the field, especially the north of Uganda.
- Lack of access to regional information.
- Lack of systems for the delivery of market information to farmers.
- High cost of radio broadcasting.
- Lack of funding to support the micro-scale marketing service.

Session II

Discussion on the types of market information and the needs for marketing information

Question and answer session

Following the presentations described in the previous papers, a plenary session was held in the form of a rapid question and answer session to gain information from the floor on the topics outlined in the agenda.

What market information is available to small-scale stakeholders?

Price information is available at a number of sources:

- National Bureau of Statistics data (long-term price data sets from 5 urban centers).
- IDEA trade forecast (forecasts on production of maize and beans).
- The East African newspaper (regional trade figures).
- Foodnet—macro prices for 27 agricultural commodities collected from 19 market centers.

Other sites, which can be evaluated for trade and price information include:

- Trade point, i.e., United Nations Commission for Trade and Development (UNCTAD)
- FAO marketing information site (see FAO website)
- International Fund for Agricultural Development (IFAD) provide knowledge network
- Bank of Uganda annual data in terms of background information to the budget
- Large traders and commodity marketing groups/companies
- World Food Program weekly data in target zones
- Ministry of Finance and Economic Planning—district resource endowment
- Websites—zimex
- Media (newspapers)
- NGOs working in focus areas, e.g., Association d'Volunteer Service Internationale (AVSI), Italy
- Agricultural review—bimonthly
- Radio stations that provide market information
- Ugandan Export Promotion Board
- Kenya Agricultural Commodity Exchange (KACE) for commodity prices in Kenya
- Tanzania Market Information Bureau (MIB)—provides local prices and also monitors international market prices for cash and food crops across Tanzania.
- Rwandan Food Security Project (PASAR) collects biweekly information on 37 commodities across Rwanda
- Coffee Development Association (UCDA)—provides data on coffee prices, output, and quality
- Natural Resources Institute (NRI) report on community access to marketing opportunities.
- Other consultant reports and agencies such as IDEA
- NARO provides market information on comparative advantage of crop production in different areas.

What is the evidence that market information is needed?

The past experience of the Government run market new service (MNS) was that traders and farmers where very interested in obtaining price information. Even if prices were somewhat late, the weekly information gave people a general impression of recent market trends and the prices that prevailed across the country. The price information was also used by local tender boards and it gave both farmers and traders some form of reference point for them to make decisions on what and how much to grow.

Irish Foundation for Co-operative Development (IFCD)—Rakai branch

In the past, commodity boards used to guarantee prices for their specific products and this guarantee encouraged farmers to produce more products in the knowledge that a market would be found. After the demise of the commodity boards, there was no experience with individual farmers on how to develop strong market linkages or how collective marketing organizations could be supported in the new postliberalized period.

For the sake of food security, monitoring of changes in price is essential. Farmers want to know something about market trends in order for them to plan for future production. It has been the experience at IFCD with a number of collective marketing groups that farmers can achieve higher prices and higher volumes of sale if they are organized and can provide a certain quality and quantity of produce, rather than dealing in very small amounts of produce with local traders. In addition to price, farmers need to be informed about which varieties are in highest demand and the quality characteristics that are gaining the premium prices, showing highest market demand. It is clear from the work at IFCD that we need to focus on the future and seek ways of strengthening the hand of farmers such that they can make better decisions on how to use their resources and clearly for them to maximize their returns. Having an accurate and reliable source of market information will enable the farmers to be able to negotiate with traders; it will give them an idea of the market opportunities and, in the future, may provide avenues for farmer organizations to play a stronger role in the trade sector.

Market information is useful as:

- It provides information on market trends.
- It provides access to market opportunities.
- It enables collective marketing groups to increase their sales volumes.
- It provides information on quality.
- It provides a means to improve future planning.
- It enhances negotiating power.
- It provides the district tender board with a reference point for negotiating with suppliers.
- It gives price projections, which assist traders, farmers, etc.
- Differences in spatial price data are not only due to transport costs, hence there is need for price market information to offset this problem.
- It represents > 24% of information needs according to a recent market survey.
- Lack of market information is a contributory factor to waste/losses.

What types of market information are required?

- Price data
- Quality
- Volume
- Demand
- Supply and Trading information

Price data

The major types of prices that are collected include:

- Farm gate
- Wholesale (generally considered to be the most important)
- Retail

Farm gate

The view on farm-gate prices was that it was expensive to collect and many considered that farm-gate prices were highly variable which made it difficult to interpret or use as a basis for advice. On the other hand, it was considered to be useful to farmers, so that they could judge the range of prices being achieved. It was also particularly useful to collective marketing groups, as it provided a very useful reference point on how effectively the group was performing relative to the farmers dealing as individuals on the open market. The view was expressed that all farm-gate prices are the same, and although this was not confirmed by the group, it was agreed that similar prices is a better indication of collusion than free market price fixing.

Wholesale

The view was expressed that wholesale prices are easier and cheaper to collect as the information can be obtained from the markets. The price can be verified more easily by talking to a number of traders to compare prices and also by comparing off-lorry and sales prices. As the wholesale price is the main dealing point, the other prices, such as farm gate and retail, can often be estimated from the wholesalers' price. It was agreed that given a situation of limited resources, that wholesale prices were the most important indicator of market trends and some expressed the view that only wholesale prices should be collected.

Retail

Although retail prices are clearly a function of wholesale prices, they are often the most volatile price index and therefore are important for food security analysis. It may also be the fact that if the retail price is the most sensitive indicator of change then it is useful for investigating reasons for price changes.

Quality

Within any given commodity, there are price differentials and this is generally based on quality. For example, with maize, there are premiums for well-filled, disease-free, clean, dry grain. The view was strongly expressed that the low price traders often pay at the

village markets is to offset the costs of cleaning and grading the grain before it is sold to the consumers. Given this situation, market efficiencies could be gained at the farm level if farmers were aware of price premiums and made the effort to meet known standards. This is an area where "collective marketing organizations" may have a future advantage, in that they can accept produce from the farmers under the condition that it is clean, dry, and of a known grain size.

Volume

Knowing the volume of trade is often a difficult parameter to measure accurately, but an idea of the volumes traded provides a useful guide to procurement agencies such as the World Food Program (WFP) and traders on the levels of transactions and quantity of a commodity being handled. Having a good idea of the volume of trade is also very important as a means to confirming trade projections.

Demand information

This provides an idea of levels of produce required by the market, a measure of the strength of a market to pull in produce to meet consumer requirements. Demand information is based on the market pull and is therefore determined by many factors including season, consumer financial capacity, novelty, quality, and culture. A simple example of this is cultural information. Peak sales of specific commodities can be based on annual events such as sales of turkeys at Christmas, cassava at Ramadan, and roses at Valentines. Countries often show very characteristic peaks in demand for such items for culturally linked items. The overriding factor affecting demand is the weather, which is linked to the agricultural production calendar. As crops become scarcer in the market, demand and prices increase. Weather also drives sales of associated products, such as cold drinks during the hottest time and umbrellas in the rainy season. Shifts in demand for commodities can be related to price shifts in the market, such as consumers buying cassava instead of maize as it is cheaper. Demand is also closely linked to quality in terms of price but also in terms of consumers' willingness to pay premiums for products that are of a known standard, i.e., labeled goods or produced through a specific production system, such as organic goods. Long-term shifts in demand are continuous at the market place and traders or retailers generally aim to find ways of exploiting change in eating habits and also ways of adding value to products, such that it meets the needs of consumers but also allows for higher margins on fewer transactions.

Supply information

This information is the converse of demand, but is also essential to the trader as this enables traders and retailers to set prices based on "demand" and current stocks in the marketplace. Following the classic rules of demand and supply, prices increase as supply falls and therefore making gains on the market place is based on a sound understanding of the current market equilibrium between demand and supply. Market prices are fixed continually, but generally over a day there is little change, particularly if produce is sold on a lot by lot basis as is done in many African markets. Factors effecting supply include the weather which is linked to production of agricultural produce, knowing where produce is grown, i.e., in March product A is available from the West of the country for

3 months, but then the source of supply shifts to the East perhaps due to local climatic differences. As much of the produce in Africa is rainfed, supply is also dramatically affected by annual weather conditions, giving bumper harvests in years when conditions are good, but also almost no harvest during periods of drought and flood. Physical factors effecting supply include road conditions, opening of new roads, availability of transport, linkage between traders along the supply chain, storage conditions in terms of how much is stored, and current reasons for storage. Other factors include local politics, sudden outbreaks of pests and diseases that affect production, and competition between markets, i.e., the ability of farmers to sell into alternative markets. Having access to information is critical for all traders as this enables them to fix prices and avoid having selling short, i.e., buying at a high price and then having to offload for less.

Trading information

This is the gossip section and is the type of information that traders thrive on. For traders to work effectively in the system, they need to know who is buying, who is selling, who is liquid, and who is likely to go to the wall. Traders obviously like to know who is coming into the market (i.e., the WFP), what amounts they are likely to want, if the Kenyans need grain, if the Rwandan harvests are going well, and what are the likely opportunities. All of this type of information can be of benefit to the producers groups, to provide an overview of the market situation.

For the farmers, who may have very little contact or access to the traders, it would be useful to have a list of traders with some information on what they trade and an idea of the volumes in which they deal. The farmers suggested that in addition to the lists of buyers, there should be some form of quality assessment, or that traders who cheat farmers should be exposed. In the short term, it would also be useful for the headquarters of the collective marketing groups or farmer associations to be able to contact certain traders to seek bid prices and determine who to seek out when trading begins in earnest. In Kenya, the establishment of the Kenyan Commodity Exchange provides just this type of forum, where producers, farmers, and traders can post bids onto the floor as a means of initiating the trading. Having this focal point provides simpler access to the market and will provide more transparency in the system of trading.

What is the impact on traders?

One of the concerns raised was the general view that traders were always the bad guys, who cheated farmers as a matter of course. There is also a widely held misconception that traders are a necessary evil. The meeting reviewed this idea and it was considered that traders play a vital role in the marketing chain and that any market information service should seek ways to support farmers in obtaining a better or fairer price. The system should also support traders in terms of quality of goods they receive, close contact with farmer associations, listing potential clients to trade with, and access to new and larger market opportunities.

What types of benefits can be expected from a MIS?

- Farmers—small/large-scale producers can increase profits and sell more produce.
- Traders—small-scale and export market opportunities can be assessed.
- Consumers—greater choice, lower prices.
- Planners—market information provides the potential for greater flexibility in the choice of crop and quantity to produce/sell/buy.

Market information is generally useful within a free market economy as forward information on demand and this can have a significant positive effect on poverty alleviation as outlined in the Plan for the Modernisation of Agriculture in Uganda.

How can the required information be gathered?

Sources of information:

- Uganda National Farmers Association (UNFA)
- Traders
- Ministry of Trader and Industry/Agriculture personnel
- Farmers/Farmer associations
- NGOs
- Collaborating programs, such as FEWS, IDEA
- World Food Program
- MIS staff
- District staff
- Market associations

Points for action

- Need to expand data collection points to region.
- In collecting data, time, cost, and accuracy should be considered.

By what method should market information be disseminated?

- **Radio**—In Uganda there are now many radio stations such as Radio Uganda, CBS, Sanyo, Capital, and Voice of Toro and so stiff competition in the choice of who should broadcast the national market information. There were differing views on the merits of the various stations. It was suggested that although Radio Uganda has the widest coverage and in the most languages, the programming was dull and people no longer listened to the Government supported Radio Uganda. Arguments for Radio Uganda emphasized that Radio Uganda not only had the capacity to cover the whole country (and for most Ugandans, Radio Uganda is taken as gospel truth), it also has a reputation of being for the people. Serious people will listen to information if the program is well packaged, well timed, and has a clear target group. The strengths of Radio Uganda are that it broadcasts in all the major languages in Uganda, it provides a known means to supply official announcements, and it already has farmers' programs.

The advantages of the FM stations are their popularity, their management skills, and their ability to attract sponsors. Stations such as FIDA in Masindi were already broadcasting market price information and this was very much appreciated by the local traders. The limitations of the FM stations are that they have a limited range and may be more expensive than Radio Uganda.

- **Newspapers**—including *New Vision, Monitor, Bukedde* (local language), and the regional East African Newspaper.
- **Bulletin boards**—Masindi set up a pilot site for a bulletin board. The information came but from the market news service (MNS) and was used by local traders. This idea could be extended to local stockists.
- **E-mail**—An increasing number of NGOs and projects are now connected via the e-mail and this could provide a simple network for both collection and dissemination of information. A list of potential clients and suppliers should be identified.
- **Meetings**—It was suggested that local meetings could be arranged such that farmers could go to a known place, and on specified date to receive market information from someone who is connected via the e-mail or has a radio.
- **Word of mouth**—Simple extension of the notice board or meeting idea to disseminate the information on a localized basis.
- **Recorded messages via phone**—Free phone; telephone/fax could be used to send/receive information in the agricultural areas (telecenters). This idea was not considered to be very practical, but this may be because people are not used to effective telecommunications in Uganda.
- **In Rwanda**—The market price data is disseminated via printed bulletins, e-mail, fax, bulletin boards, via the collectors who return with summarized data. Twice a week there is a radio program for farmers and price data is broadcast when there is volatility in the market.

How do we include stakeholders in decision making?

Stakeholders should be involved in all levels of the system and the system must be established with strong participation from the end users, i.e., farmers, traders, and media personnel.

How do we assess quality/usefulness of market information?

Monitoring and evaluation

- In Rwanda there are many different sources of market data. To assess the relevance of the different data types, it is necessary to conduct a survey across sources. There are also simple indicators and, in Rwanda, if the data, is late many people phone in for details, i.e., there is an immediate response.
- A system needs to be set up to regularly evaluate data quality with clients. One option for this is to establish listener groups who can work with local trade officers to set up a feedback mechanism. This can be used to target the information in a better format with more useful information to the client group, at the right time,

acceptable language, and within a package that also explains to the listeners how to use this information.

- In Tanzania surveys are conducted to assess the value of the service across the country, the number of users, and how information is used and its merits.
- Need to train the data collectors in methods to assess the usefulness of the information.
- Agricultural Review—can respond to questions from clients.
- Need to find a means to measure changes in attitude/behavior of the farmers/traders, how they use the information, and what they are doing now which was not possible before.
- If we are to measure the effect of the system on poverty, then we will need to conduct some sort of baseline. Selecting valid indicators of change is difficult but we need to focus on those indicators, which may contribute to lifestyle, i.e., this would be a qualitative approach rather than getting hard quantitative information.
- One of the indicators for success would be a reduction in the average differences between farm-gate and wholesale prices. This type of evaluation needs to be assessed over a 6–12 month period to take out effects of localized and short market influences.
- Another indicator of success across a region would be to reduce prices of commodities between markets, or to measure changes in spatial arbitrage, such that differences in market prices between markets is related to transport costs and not a lack of linkage.
- Monitoring survey—who is listening? Is it valuable? Feedback from clients.

Session III

Outline of a plan to develop a trade-oriented market information service for small-scale stakeholders

Peter Robbins

Commodity Market Information Service

In this session we want to discuss what a market information service targeted at small-scale farmers, traders, and processors should do and how it should do it.

We have already discussed why such a service is needed. Trade in Ugandan agricultural commodities is typified by long chains of transactions (often there are five transactions between the farmer and the wholesale market) with each intermediary requiring a margin to cover administration costs and make a profit. This results in very large differences between the price received by producers and the price paid by consumers.

Many farmers know very little about the state of the market in their nearest town let alone the wholesale market in Kampala. Many can't read and may speak only one of twenty or so languages. They may have access to only one trader and there is evidence that traders collude with each other to keep farm-gate prices down. Farmers are in a poor bargaining position. They are price takers not price makers.

In order to improve their position in the market, they need to know, at least, the current price of the product in different markets, where those markets are, and the different prices for different qualities and quantities of the product. They also need to know where they can obtain credit and how to benefit from different marketing strategies.

IITA has taken the initiative to work with other agencies to establish a new market information service in Uganda.

IITA want to start by establishing a small, but representative pilot project (Fig. 9). This will be necessary to discover whether such a service really does assist actors in the industry and, if so, how the service could be extended more widely in the country.

The idea is that this will entail identifying groups of farmers and traders and working with them to supply the information they need. Data will be collected from markets, traders, and the farmers themselves. This data will then be disseminated by radio, in the appropriate languages, to the groups concerned. We estimate that a daily radio broadcast of about two minutes and a weekly 15-minute radio program would be adequate for transmitting the information and be cost effective.

The 15-minute program will need to reflect the small-scale operator's point of view and should be interesting to listen to. It should not be full of boring statistics. The idea is to convey the information through short interviews and stories about how other groups organize their work. It should offer advice and news about transport difficulties, foreign buying, crop forecasts, etc. In order to do this it is necessary for us to get as much feedback and assistance as possible from the target groups and from other agencies and NGOs working with farmers and traders. Many of these groups and agencies are represented at this meeting and we now want to hear their views and get their advice on how we should proceed.

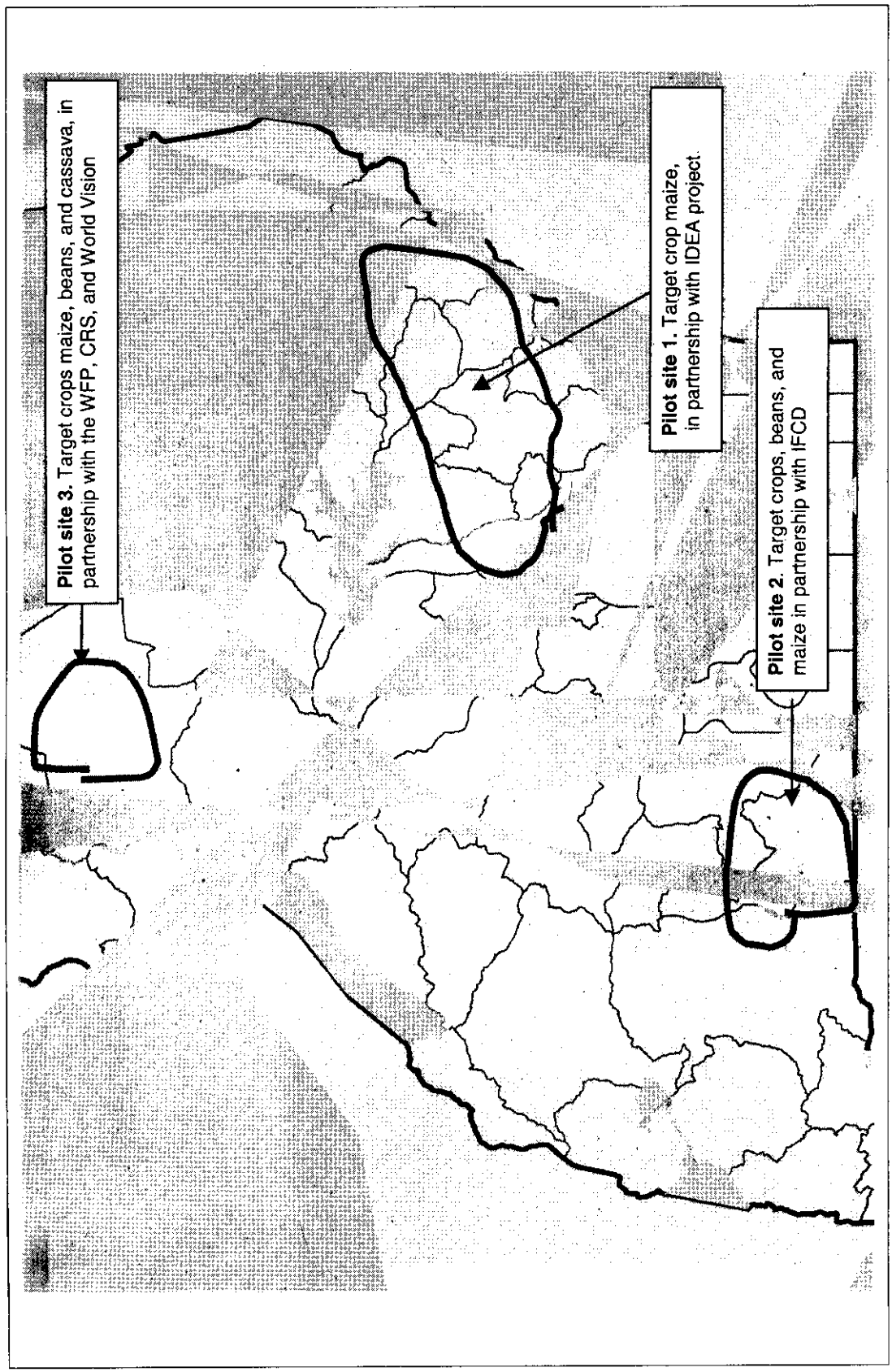


Figure 9. Sites, target crops, and partners for the market information pilot schemes.

Session IV

Discussion on the sustainability of a marketing information service

Who is currently supporting the marketing information service in Uganda?

- USAID/ACDI/VOCA are financially supporting the macro-scale market information service (national), which is designed to gather price data from across the contry and supply analyzed information to the policy level agencies. This program has funding to collect price data at the national level and then to disseminate it to agencies, which are connected to the e-mail. The funds in this program do not allow for localized data collection, brokering information in the sense of finding buyers and sellers, and broadcasting the information on a regular basis through the media, such as radio and newspaper.
- The Center for Technical Assistance (CTA) is funding the development phase of the micro-scale project designed to meet the needs of farmers, traders, and consumers.
- USAID/Regional Economic Development Services Office (REDSO) is funding the regional program Foodnet, which will act as the focus for the regional price information system. Information from this aspect of the work will be disseminated via the Internet, at http://www.cgiar.org/foodnet

Who should or can contribute/support the service in the future?

AVSI, an Italian NGO, can provide personnel to collect price information in Kitgum and other areas in the northeast. The people may require some training but as the communications with Kampala are relatively good via the e-mail, the service should be cheap.

The Bureau of Statistics can provide long-term data for the various commodities being analyzed and the data set can be used as a reference point. This is particularly useful if the program is focusing on wholesale prices as the Bureau of Statistics collects mainly retail prices.

CBS has a 30-minute radio program dedicated to farmers and would be pleased to include the price data and a summary of market news in their broadcast.

The World Food Program has a new project, which is about to be established in the north of Uganda, specifically in Gulu, Kitgum, and Moroto. This program has a highly market led strategy as the WFP is developing the framework of an exit strategy as it is expecting to reduce food aid in the region. WFP is therefore keen that farmers are provided with the tools, seeds, and marketing skills to be not only more self reliant but also more competitive within the Uganda market economy (WFP 1999).

The World Food Program would be interested to support the costs for a 30-minute slot of time on Radio Paeda in Gulu, and to provide technical support in terms of personnel to collect price information and also to disseminate price data. It is clear from the

program that some training will be required and as WFP is a buying agent, they would be interested to see how collective marketing groups could be established to sell produce into the WFP program.

Sponsorship of the system via private sector

The possibility should be explored to gain sponsorship from the private sector for air-time on radio or to improve communications between producers and traders or between traders via the public telephone network. The current changes being set up by the mobile telephone network (MTN) in Uganda could be a possible avenue for support of communications systems.

Market revenue

For real sustainability, users should also contribute to the system and therefore if traders can see that they are benefiting from the system, they could be asked to give some form of financial support. This could be done through local taxes/levies made on the market which are raised by organizations such as the Owino Market Traders and Transporters or the Ugandan Manufacturing and Vending Association.

Cost saving/cost sharing

Another approach to the problem of cost is finding ways to reduce costs of the service and it is also the desire of IITA–Foodnet to see whether it is possible to spread the costs through buy-ins for this service, from other donors. Target donors include those immediately connected with the PMA, these being the European Union, the Department for International Development (DFID), and the Danish International Development Agency (DANIDA).

Session V

Regional market information services

This session was concerned with gaining a better understanding of the types of market information services, which are already in operation in the region or are about to start. Papers were given by the Tanzanian Marketing Bureau, the Kenyan Commodity Exchange, and the Rwandan Food Security Project. A recent review on the need for a regional market information service is given in Annex 6.

Tanzanian market information services[1]

Frederick Mashamba

Marketing Officer, Tanzanian Marketing Development Bureau (TMDB)

The Tanzanian Marketing Development Bureau (TMDB) was established in 1971 as a United Nations Development Program (UNDP) project. The objectives of the MDB before market liberalization were to:

- Set official consumer and producer price levels (panterritorial price setting).
- Conduct surveys to determine costs of production estimates on behalf of the cooperative unions.
- Collect parallel market prices (particularly consumer prices) as a result of emerging parallel market in early 1980s.

After the policy changes resulting from market liberalization during the years 1985–86, the objectives of the TMDB were changed to:

- Collect price information and disseminate information to the public and private sectors (Tables 3, 4, and 5).
- Formulate marketing policy. Propose measures to regulate the marketing of crop subsectors with most emphasis on cash crops, which were closely monitored.

[1]See Figure 10.

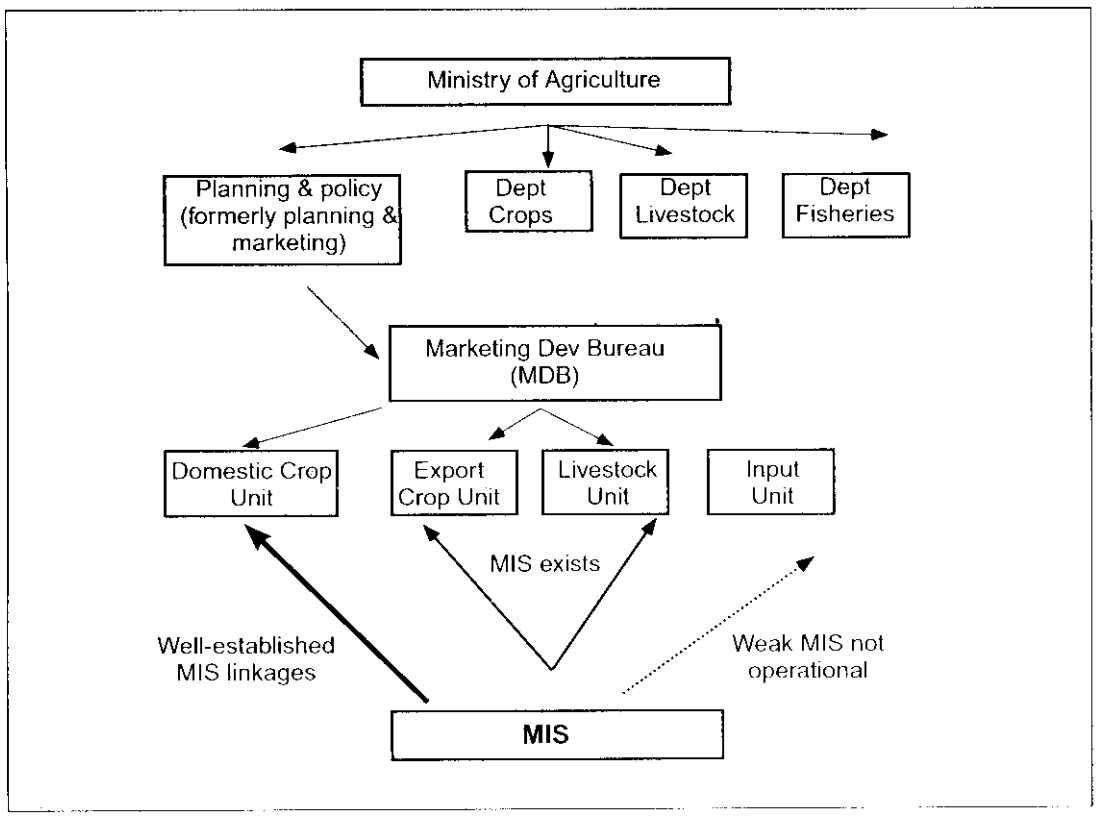


Figure 10. Flow diagram of the Tanzanian MIS with levels of linkage to sectors.

Table 3. Scope and frequency of data collection collected by the Tanzanian MIS.

Retail prices	
Crops/products	Bananas (cooking, ripe), dried beans, cabbages, cassava (dried, fresh), coconuts, cowpeas, maize (grain, flour), finger millet, g\nuts, onions, oranges, potatoes (Irish, sweet), rice, sorghum, *tomatoes, wheat flour, beefsteak, mixed cuts, beef liver, offal,* chicken, milk, and eggs.
Markets	45 markets around the country.
Frequency	Twice monthly, on 1st and 15th.
Methodology	Enumerators ask 6–8 traders per crop to declare their selling prices. Highest and lowest prices are recorded.
Transmission	Filled in questionnaires are posted to MDB office in Dar-es-Salaam.
Wholesale prices	
Crops/products	Dried beans, maize, millet, Irish potatoes, rice, sorghum, and wheat flour.
Markets	Up to 20 regional capitals.
Frequency	Three times weekly (Monday, Wednesday, Friday).
Methodology	Enumerators ask 6–8 traders per crop to declare their selling prices. Highest & lowest prices are recorded.
Transmission	Highest & lowest prices per crop are transmitted to Dar-es-Salaam by Ministry of Agric./local govt. radio call/telephone.
Wholesale quantities	
Crops	Maize, rice dried beans and sorghum.
Markets	Dar-es-Salaam (Tandale & Buguruni), Mtwara, Arusha, Mwanza & Lindi.
Frequency	Daily, seven days a week.
Methodology	Complete enumeration of vehicles entering market area. Transporters declare volumes which are summed.
Transmission	Volumes are delivered directly (Dar-es-Salaam) or posted to Dar-es-Salaam.

Table 4. Data analysis and dissemination of market information.

Radio broadcasts	
Crops\Products	Dried beans, maize, millet, Irish potatoes, rice, sorghum, and wheat.
Markets	Up to 20 regional capitals.
Frequency	Three times weekly (Tuesday, Thursday, and Saturday).
Format	Reading of average wholesale prices by crop by reporting regional markets.
Target audience	Farmers, and traders.
Newspapers	
Format	MIS prepare summary of wholesale prices, collected and published by the newspapers, mainly *Business Times* and *Financial Times* released every Friday and Wednesday respectively.
Crops	As those covered in Radio broadcasts.
Markets	As those covered in Radio broadcasts.
Frequency	Every Friday *(Business Times)* and Wednesday *(Financial Times)* of a week.
Target audience	Traders, farmers, and policy makers.
Periodic publications	
Monthly/Quarterly Market Bulletin.	
Crops/Products	Bananas (cooking, ripe), dried beans, cabbages, cassava (dried, fresh), coconuts, cowpeas, maize (grain, flour), finger millet, g\nuts, onions, oranges, potatoes (*Irish potato*, sweetpotato), rice, sorghum, tomatoes, and wheat flour, beefsteak, mixed cuts, beef lever, offal, live chicken, milk, and eggs.
Markets	Around the country.
Frequency	Monthly/quarterly.
Contents and format	1. Commentary on maize and rice markets. 2. Graphs of national average monthly maize and rice prices (nominal, deflated *and seasonally adjusted) and volumes of* maize & rice deliveries to Dar-es-Salaam. 3. Listing of crop prices by market for current and previous periods, percentage price change from previous periods
Target distribution	About 300 copies monthly/quarterly to central ministries, regional and district officials, research institutions, private people and donors.

Table 5. Markets in Tanzania where price information is collected.

Zones	Urban markets
Northern	Arusha, Mbulu, Moshi, Gonja, (same)
Northern coast	*Dar-es-salaam, Mafia, Bagamoyo,* Kasarawe, Morogoro, Tanga, & Luhoto
Lake Victoria	Bukoba, Mwanza, Geita, Ukerewe, Magu, Kwimba, Sengerema, Musoma, Tarime, Shinyanga, Maswa, and Kahama
Central	Mpwapwa, Dodoma, Songida, Tabora, & Urambo
Western	Kigoma, Kasulu, Kibondo, & Mpanda
Southern highlands	Sumbawanga, Mbeya, Njombe, Iringa, Mafinga, Songea, *Mbinga, & Tunduru*
Southern coast	Mtwara, Lindi, Newala, & Masasi

Evaluation of information needs among users

As a means of assessing the effectiveness of the service, the Ministry of Statistics has conducted a number of surveys to get feedback on how different users perceive the marketing information service.

The first major survey was conducted in 1991 to evaluate the wholesale trade of grains and beans. The results from this survey indicated:

- Of the traders interviewed, 85% listened to the radio broadcasts, but perception of the radio broadcast varied.
- Sixty percent of traders interviewed were positive, while the majority of the remaining traders had a rather hostile attitude to the system because they found it harder to negotiate with farmers who were also aware of prevailing prices.
- Radio broadcasts had some degree of impact in improving a certain level of market transparency.

In 1993, a second survey was made to assess users' opinions regarding the monthly market bulletins. The survey found out that most readers simply indicated that the bulletin contained useful information and that they wanted to continue getting it.

Survey of market information users in four regions in 1994

This survey covered Tanga, Dar-es-salaam, Dodoma, and Tabora. It was designed to assess the extent to which the information disseminated by MDB is understood and used.

Findings

Farmers

- Ninety-one percent interviewed regularly listen to radio broadcasts on the prices.
- Sixty-two percent make use of the information.
- The extent to which they make use of their knowledge of market information depends on the level of competition among traders at village level.

Suggestions made

- A range of prices should be broadcast instead of average price per unit. The range should indicate the minimum and maximum.
- Price broadcasts should be repeated at night in order to make sure a large target audience is reached.
- The market coverage should be extended to include district wholesale markets.

Traders

- Seventy-four traders were interviewed and 77% used the information.
- Many pointed out that their main sources of information are other traders and relatives.
- Current market information aired over the radio is not adequate because:
  - minimum and maximum prices were not indicated
  - the service did not provide any indications of the probable duration of the current level of prices or demand.

Problems of the current market information service

Shortcoming in the coverage of markets

- The service only covers 45 market centers across the country, which are not enough to represent the whole country.
- Commodity coverage is limited only to 27 products, while the rest are not included in the system.

Lack of efficiency regarding marketing reporting

- No regular supervision of market reporters.
- Time lag between price collection and price transmission.
- Delays in information to reach the MDB's headquarters caused by inefficient communication systems. It can take several days for mailed information to reach Dar-es-Salaam.

Lack of handling and data collection facilities

- Poor handling facilities especially for livestock.
- Lack of calibration of weighing scales.
- Lack of working equipment for market researchers.

Problems related to data processing

- The computerized processing of data using an early version of Lotus 1-2-3 is complex and time consuming in updating through complex macros. A more modern system is required.
- To reduce the complexity of data processing, a new Agric-Market software was tried, but the attempt failed.
- Data processors are faced with the ongoing problem of delays in receiving field data.

Problems related to the dissemination of information

- Lack of necessary financial resources to guarantee a sustainable market information system, e.g., lack of money to support radio programs, and to cover costs of printing and mailing regular publications.

A commodity marketing and information system for food security within a liberalized market economy

Adrian W. Mukhebi

Executive Chairman
The Kenya Agricultural Commodity Exchange

Executive summary

Economic reforms in Kenya are progressively moving towards a freer market economy and this process has introduced a range of new challenges and opportunities within the agricultural sector. The most apparent change has been the dissolution of the government led, commodity marketing boards, except for the two premier cash crops, tea and coffee, and even these may soon be privatized. Whilst the privatization process has been successful in terms of reducing state intervention in the market place, there have been few new initiatives to support farmers in the new emerging free market system. As a consequence there is an urgent need for new types of support systems, which can assist producers and buyers to operate more effectively in what should be a private sector or market-led environment. One of the more attractive support systems, which has proven to be successful in other countries is the establishment of a commodity exchange, which can efficiently exploit the business opportunities within the local, regional, and export markets. The government, NGOs, and development agencies need this type of service to build a more vibrant agricultural sector which can not only address the national food security needs but also assist in the strengthening the economic sector.

The Kenya Agricultural Commodity Exchange (KACE) is a private-sector firm, which was launched in Nairobi in 1998 to provide the basic services of a commodity exchange. The aim of the Commodity Exchange and Marketing Information Service (COMIS) is to provide producers and buyers with a focal point to conduct trade. The exchange acts as means to promote trade by gathering and disseminating market information and contributing to the commercialization of the agricultural sector. Since its inception, KACE has established a trading floor in Nairobi where buyers and sellers of agricultural commodities come to trade and to obtain market information on commodity offers, bids, and prices.

To increase its capacity and provide a better service, KACE plans to develop a national commodity exchange and market information system that will provide for more efficient ways of marketing commodities, as well as reliable and timely channels of information gathering, analysis, and dissemination. COMIS will consist of a network of market linkages at domestic (Kenya), regional (eastern Africa,) and world market levels. KACE intends to develop commodity market centers that will generate trade information, which will be compiled, processed, and relayed back to the market centers, such that market participants can make more informed decisions on buying and selling. Trade data will be supplemented with related information on government policies and changes in currency rates and interest rates, inflation and exchange

rates will be monitored, and details on production patterns and weather forecasts provided. To sustain the commodity exchange, KACE intends to generate revenue from commissions on trade through the floor of the exchange, from the sale of commodity information, membership subscriptions, and from solicited advertisements in publications and bulletins.

The real difference between KACE and the previous marketing boards, is that KACE will be run as a private business and will provide a service to paying members, therefore the service will be tailored to meet their needs.

Introduction

In Kenya, as with other countries in Africa, there is steady movement from state controlled economies towards the free market model. The most notable of the reform measures includes the elimination of price and foreign exchange controls, liberalization of grain marketing, and reductions in import licensing. Additional reforms are still being undertaken in terms of privatizing the parastatal organizations. These reforms have introduced new challenges and opportunities within the agricultural sector and new strategies are required for countries such as Kenya to meet the future food security needs of the country.

Prior to liberalization, the government's marketing boards monopolized the marketing of major agricultural commodities. The National Cereals and Produce Board, the Dairy Board, the Kenya Meat Commission, the Tea Board, the Coffee Board, the Cotton and Lint Marketing Board, etc. are examples of boards, which have controlled the marketing of agricultural produce for many decades. Farmers produced, harvested, and delivered to the boards at prices fixed by the government and producers waited for payment, albeit often many months after delivery.

Challenge of market liberalization

Except for coffee and tea, which are still controlled by the respective boards, farmers now sell their surplus produce in a relatively free market. However, farmers are facing several new challenges as they learn to deal with a liberalized market. The most commonly cited constraints include inadequate storage facilities in which to hold produce and then benefit from off-season prices, lack of market information including information about alternative markets, and lack of working capital which forces farmers to sell their produce immediately after harvest, often at very low prices.

Buyers of agricultural commodities also face new challenges. In the past they would buy commodities of a known quality in large quantities from the marketing boards, whereas now traders deal directly with farmers. Buyers are no longer assured of a standard quantity or quality. The result is that buyers face higher transaction costs in sourcing produce from farmers who, by virtue of being individual smallholders, sell produce in small lots of mixed quality. These high marketing costs are in most cases passed onto both the farmers, who receive lower farm-gate prices and consumers who pay higher retail prices.

For the producers, market liberalization has meant they no longer have guaranteed markets and many farmers have problems in accessing markets. Unfortunately, most farmers especially smallholders, have little or no access to market information. Equally, buyers (traders, processors, or consumers) of the commodities do not have a reliable source of information about the many alternative producers or suppliers of the commodities or the quantities and quality of those commodities available and their prices.

Without sufficient and transparent information about "who has what goods", "how much commodities are available for sale", "who wants what", "how much commodities to buy", "when", and "at what price", the liberalized market does not work efficiently and certainly does not provide a level playing ground for buyers or sellers. At times of bumper harvest, sellers (mainly farmers) can easily be exploited with low offer prices. On the other hand, in times of deficit, buyers (mainly consumers) are also easily exploited, with too high prices being asked for the commodities. The marketing situation, in the absence of market information is clearly open to widespread manipulation and there is evidence in most markets of trader collusion.

In addition to liberalization, the government has also developed a plan for industrialization of the economy by the year 2020. As the economy is largely dependent upon the agricultural sector, which contributes 30% of GDP, improving the efficiency of the agricultural sector is a prerequisite for growth in other sectors of the economy. Improving agricultural marketing and trade through efficient information services is therefore a critical component in the overall development plan.

The challenges posed by market liberalization and the desire to industrialize the economy early in the next millennium mean that national food policy must no longer simply focus on the outmoded view that increasing food production will lead to food security and then prosperity. Liberalized markets and the effects of globalization mean that Kenyans are now in competition with farmers and trade houses from across the world. In order to be competitive, marketing issues must take a lead role in developing the reformed agricultural sector. Given this change in perspective, it is apparent that once fixed priced markets have been abandoned, a new system for the provision of accurate and timely market information is the first step in supporting both producers and buyers.

Regional dimensions

There are ongoing efforts by governments to strengthen regional cooperation and market integration, for example the East African cooperation among Kenya, Uganda, and Tanzania, and also among the countries of the Common Market for Eastern and Southern Africa (COMESA). These developments are providing more opportunities for cross-border trade in agricultural commodities. To exploit these regional trade opportunities effectively, a marketing and information system, which can process regional information, is required.

Regional information flow is important for trade and food security. Almost all the countries in eastern Africa suffer periodic conditions of severe environmental stress and civil

unrest, which include famine and cause major displacements of people. In these dire circumstances, people survive with the assistance of relief food, medical support, and supplies from governments and NGO relief agencies. Due to the need for a rapid response, much of the supplies are procured from outside the region through international procurement houses and local farmers and traders lose the opportunity to contribute to solving local problems. Again, the emergency agencies and governments could work with local or regional agents if an effective and reliable commodity exchange was in place. An effective marketing and information system would also help to identify areas of food deficit in the region and by providing areas of surplus and lists of producers and traders, could facilitate the procurement and transportation of food supplies from surplus to deficit areas, using local resources.

The need for a new type of commodity information system

The transition of agricultural marketing from the marketing boards to a free and open market is understandably slow and the terrain is unfamiliar to stakeholders at all levels. At present there is a state of limbo. Although the old marketing system has been abandoned, the new alternatives are neither functional nor widely understood. In the absence of marketing boards:

- How can a farmer access fair markets for his produce?
- How does a farmer or buyer access reliable and timely information on the price, quantity, quality, and availability of commodities?
- Where can a farmer source inputs in a timely manner and at competitive prices?
- How does a farmer access on-farm or off-farm storage to benefit from higher postharvest prices?
- Can a farmer use stored commodities collateral for short-term credit?

Clearly, a more structured alternative marketing system is required if the farmer is going to cope with the challenges of market liberalization implied in these questions.

To make informed decisions and manage risk, all stakeholders in the agricultural production–processing–marketing chain must have reliable and timely information. Farmers need market information to make good production decisions and they need to be informed about appropriate government policies and how they are changing. Traders/processors/bankers require information to exploit business and trade opportunities, which should be provided by the liberalized market environment. The government requires information to be able to make appropriate policies and measure changes in the growth of the agricultural sector. Development and relief agencies require information to provide more effective assistance to the government, trade, food security, and relief efforts.

These different stakeholders require both general and tailored information.

- How can a commodity information system most effectively play the role of satisfying not only the general, but also the specific, needs of the involved stakeholders?
- How can it be developed in ways that make the most of its contribution to the agricultural and economic growth of the whole economy?

For example, although agricultural extension is claimed to be the major communication channel between government and farmers, it is mostly ineffective. This leads to the following questions if the government is unable to provide the necessary information:

- Is it possible to involve the private-sector more actively in information generation and dissemination and introduce measures of cost sharing with the clientele?
- Can a commodity information system be commercialized as a means to maintaining and sustaining it?

Alternatively, it may be argued that as information services are vital to the liberalization process, cost sharing should be developed between the public and private sector. Perhaps governments should play a lead role in major exercises such as agricultural surveys or censuses and results from these studies can be fed into the Government planning units and private-sector programs. In other areas, such as price and short-term projections of demand and supply, the private sector is probably in a better position to act as this type of information is used by the commercial sector.

The case of the Kenya Agricultural Commodity Exchange (KACE)

Given the current uncertainty in the types of support services that are required for producers and buyers in the free market situation, new strategies need to be developed. An important question is, can the public sector provide effective market information for the private sector or should the private sector be encouraged to take on this role? The commodity exchange is a private sector-initiative, which could play an important role in the new market economy for promoting trade, discovering price, developing and disseminating information, and contributing to the commercialization of the agricultural sector. It is for the purpose of providing these services that the KACE was established.

KACE goals

KACE is a private-sector firm, which was launched on 16 July 1997 to serve as a commodity exchange for agricultural commodities. KACE has the following three goals:

1. To serve as a market for sellers, buyers, exporters, and importers of agricultural commodities in the domestic, regional, and world markets.
2. To provide reliable and timely commodity information on supply, demand, prices, and their trends in domestic, regional, and world markets.
3. To establish fair commodity market prices for both sellers and buyers through a system of competitive and transparent trading on the floor of the exchange, i.e., price discovery.

Since its establishment, KACE has set up a trading floor at the Jamhuri Show Grounds in Nairobi. The floor is open for trading all types of agricultural commodities, crops as well as livestock, and inputs as well as produce. Using a trading floor of a commodity exchange to source for commodities, buyers, or information is an efficient and effective way of conducting commodity trading business in a liberalized market environment for any stakeholder: farmer, processor, manufacturer, exporter, importer, and any other market participant.

The concept of a commodity exchange is not new, having started in the USA in the mid-1800s. Today, there are commodity exchanges in the major market economies throughout the world. Here in Africa, commodity exchanges are well established and operational as private-sector concerns in South Africa, Zambia, and Zimbabwe. Several countries in Africa and other parts of the world are undertaking economic reforms toward market liberalization and these countries are at varying stages in developing their own commodity exchanges. In eastern Africa, Uganda and Ethiopia are in the process of establishing commodity exchanges, and the parties involved have interacted with and borrowed ideas from KACE.

The plan for a commodity marketing and information system

KACE is developing plans for a commodity marketing and information system (COMIS) that involves a network of market linkages at domestic (Kenya), regional (eastern Africa), and world levels. Basically, KACE will develop commodity market centers that will generate trade information. This information will be compiled, processed, and passed back to the markets to assist market participants in making more informed decisions in their buying and selling. Trade information will also be supplemented on other related aspects such as government policies, currencies, changes in rates of interest, inflation, foreign exchange, and also production patterns and weather forecasts.

A domestic marketing and information network

The domestic (Kenyan) commodity marketing and information network (Fig. 11) will have a KACE trading floor or headquarters in Nairobi as the principal center (PC) of the system. KACE subcenters (SCs) will be established at strategic locations around the country. SCs could be at facilities leased from municipal markets, the National Cereals and Produce Board (NCPB), or private-sector providers.

The SCs will be linked to the PC by phone, fax and, where possible, e-mail. The SCs will be used as commodity buying, selling, and information points of the KACE trading floor. Information on quantities and prices of commodities sold, bought, offered, and demanded at a SC will be fed into the PC information database and information from the PC from the other SCs, and regional, and world markets will be fed back to the SC. Offers to sell and bids to buy commodities from and to the SCs will be processed at the PC in liaison with the SCs. Thus, commodity buyers and sellers and other agents will visit the SCs and PC for their market information needs. The SCs will also be used as educational centers for passing extension and technological packages such as grading, packaging, and quality control to farmers and other market participants.

Where feasible, storage facilities will be provided at a fee at the SC, where farmers can opt to store produce to await better postharvest prices. Facilities could be leased from the NCPB and/or private providers. A warehousing receipt program will be developed, in conjunction with willing banks, whereby farmers would be able to secure credit using stored inventories as collateral. A tripartite management of the storage facilities and inventory would be arranged among farmers, banks, and KACE to assure the interests and secure the confidence of the parties involved.

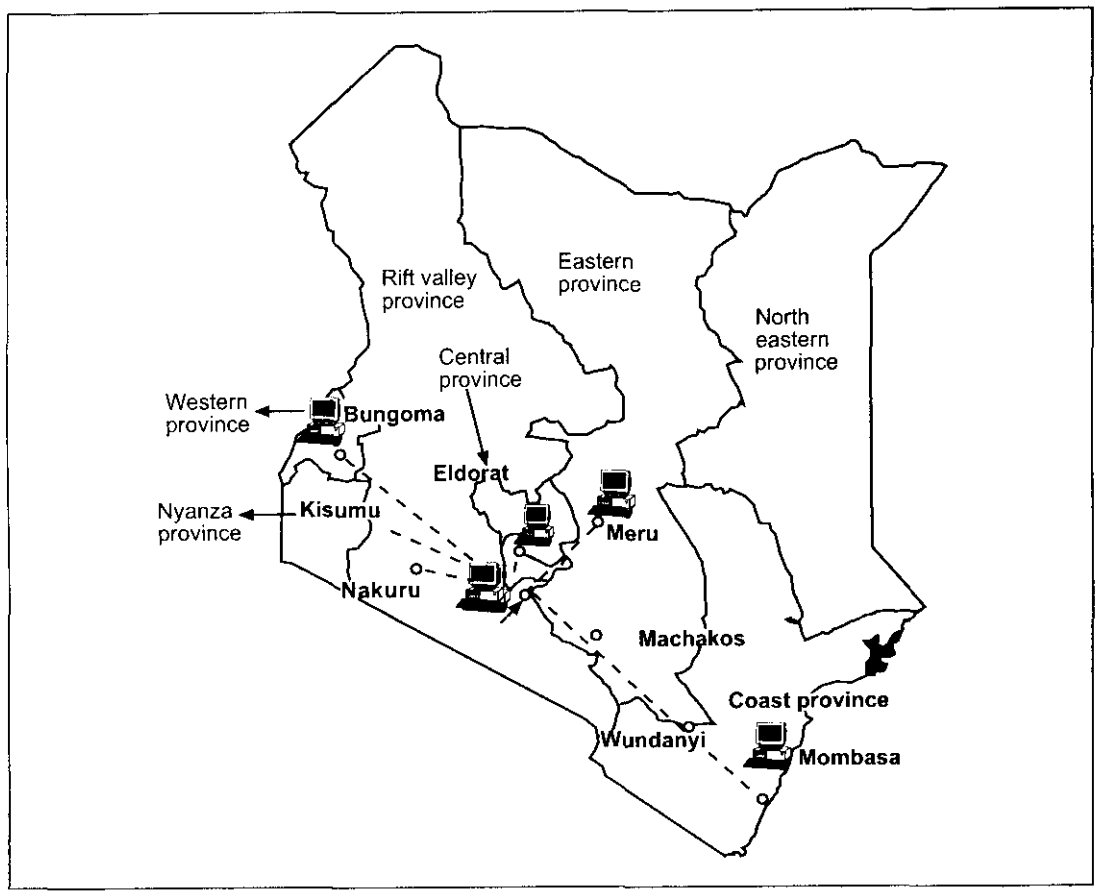


Figure 11. Domestic information system—KACE target market centers.

Regional marketing and information network

Collaborating commodity trading partners in the other countries of eastern Africa will be identified for participation in a regional commodity marketing and information network (Fig. 12). Partners will be linked to the PC in Nairobi. Commodity information compiled by KACE SCs, regional, and world markets as well as the trading floor will be made available to partners. Commodity information from stakeholders on supply, demand, and prices will be obtained by the KACE PC. Offers to sell and bids to buy commodities from and to the partners will be processed at the PC.

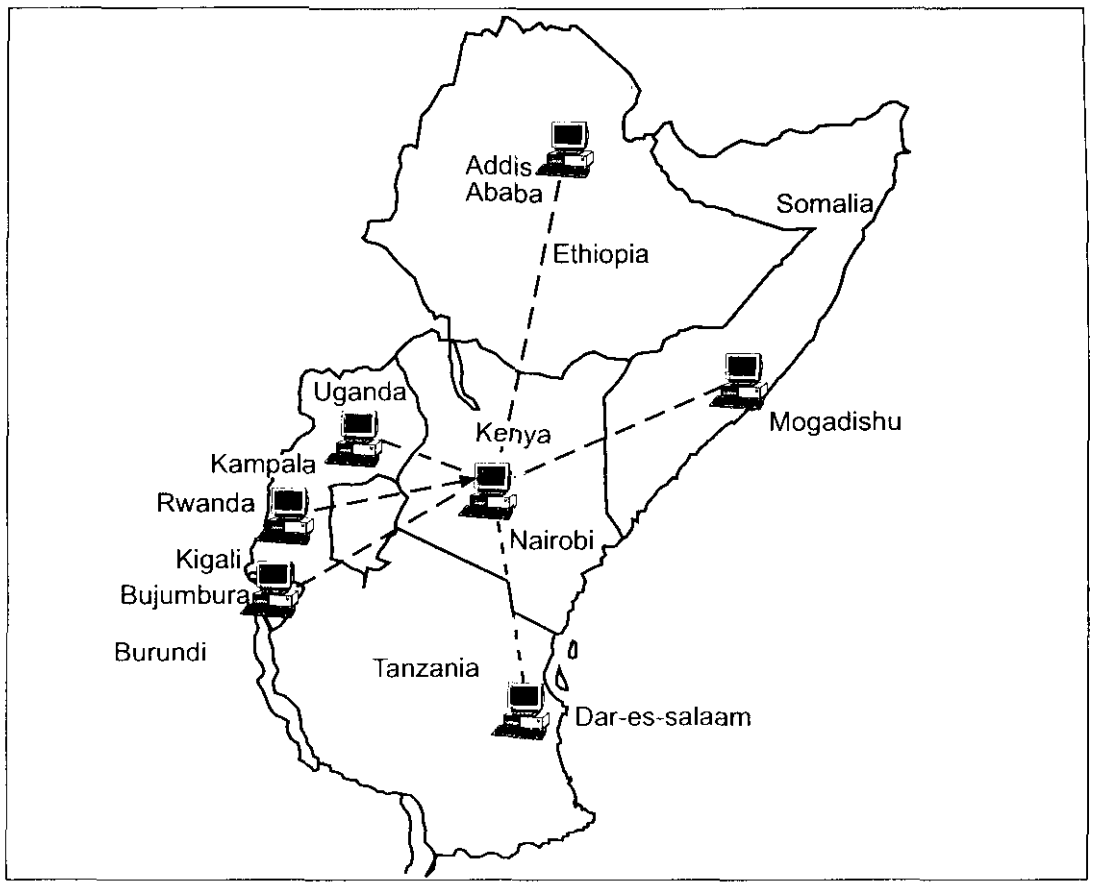


Figure 12. KACE linkages in the Greater Horn of Africa region.

Global marketing and information network

KACE is already linked to world markets through the Internet (Fig. 13). Furthermore direct linkages, for example by computer terminals for real-time data, could be developed with key world exchanges such as the Chicago Board of Trade (CBOT). KACE already receives, on a weekly basis, future prices for several agricultural commodities from major world commodity exchanges in such places as London, Paris, Amsterdam, Budapest, Chicago, New York, Winnipeg, Argentina, Brazil, Tokyo, Shanghai, Kuala Lumpur, and Sydney. These world prices will be compiled as part of the KACE PC database for dissemination to the SCs and trading partners in the regional market. Commodity offers and bids to and from world markets will be disseminated to the SCs and to the partners in regional markets. At all the market levels, the KACE PC will provide support services in negotiation, preparation, and implementation of sales contracts through the trading floor of the exchange.

Sustainability of the commodity marketing and information system

Once COMIS is fully operational, it will generate sufficient revenue to sustain its operations. Revenue will be earned from commissions on trade through the floor of the exchange. KACE will also earn revenue from the sale of commodity information. The

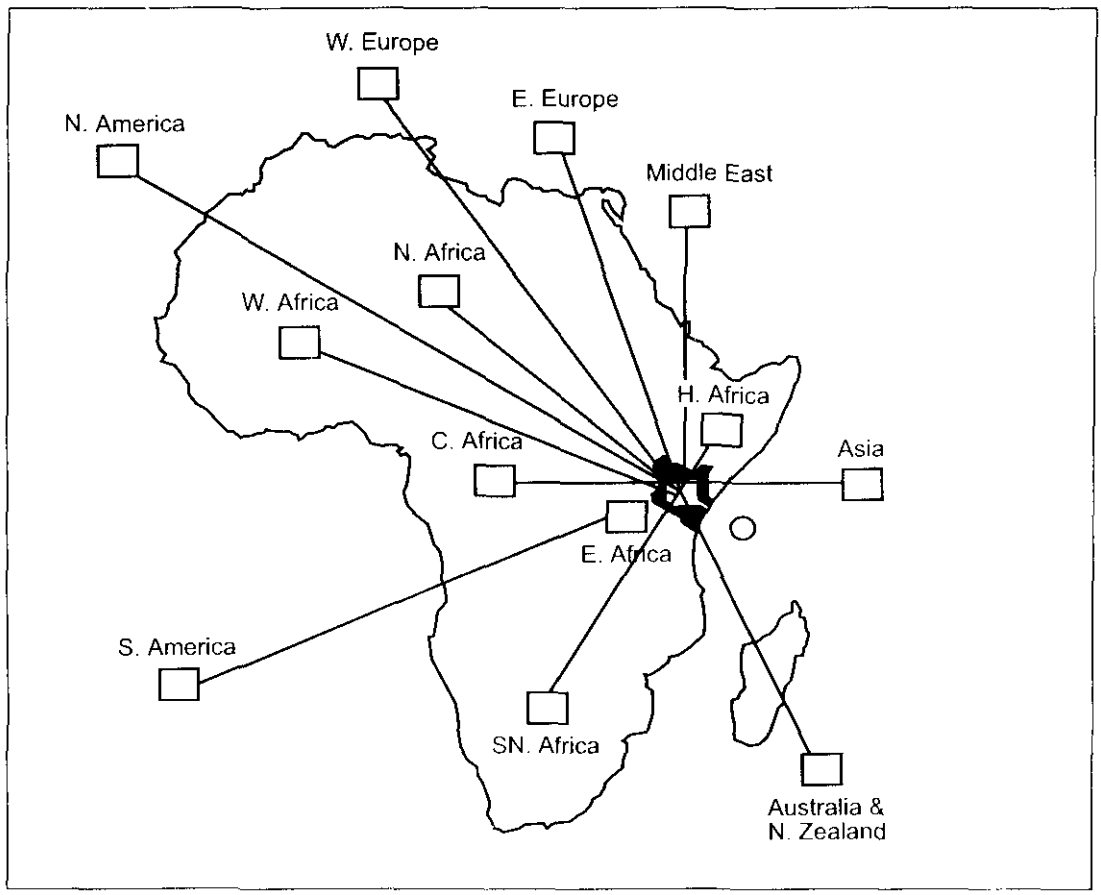


Figure 13. Global linkages within the KACE information system.

KACE PC will compile and process data from domestic, regional and world markets. Commodity information will be produced and packaged in various forms aimed at the different stakeholders. Periodic bulletins, bulletin boards, printouts, electronic media messages, print media messages, and the Internet website will be used to disseminate information. Farmers' unions, cooperatives, and other formal groups will be used as conduits for the smallholder farmer.

While certain types of information may be disseminated free of charge (such as historical price information, topical commentary, government policies, weather patterns, and forecasts) for the benefit of public education and awareness, users of most other information (such as current supply, demand, price, and forecast information) will be charged a fee to generate revenue to maintain and sustain the COMIS. In addition, membership subscriptions and advertisements will be solicited to raise revenue for the system. However, initial resources will be sought from interested parties to enable the study, design, and installation of the COMIS, and training of KACE staff in the management and operation of the system.

Conclusion

The information provided on the KACE approach has evolved through our experience over the past 2–3 years and the development of this new COMIS has come about in

response to the rapid changes that have developed in the aftermath of market liberalization. KACE is attempting to address the new market environment and is promoting the concept of a commodity exchange as a means to catalyze growth in the agricultural sector. The issues related to market reform are clearly wide ranging and include both public goods and private-sector needs. Developing such as system is complicated and it is likely to need support from both the public and private sectors if it is to provide an effective service in the near future. The need for such a system is, however, urgent and it may be that external resources are required to set this process in motion and develop the requisite infrastructure for COMIS, as part of a comprehensive national strategy for ensuring food security in a liberalized market economy. (See Boyd et al. 1999, Annex 6).

The Rwandan Food Security Project (PASAR)

Alain Houyoux

Food Security Officer
Rwandan Food Security Project, Kigali

The Rwandan Food Security Project has established a program to monitor the food security status of the country through routine monitoring of various food security related parameters. These include market prices, weather data, crop condition, transport prices, and exchange rates. These studies are also followed up with regular visits to the prefectures to assess the availability of food goods in the market and the amounts of harvest coming in from the farms.

For the market information, prices for 36 commodities are collected from 33 markets across the country. Prices are collected for a range of primary agricultural commodities, processed goods, and some household items (Table 6). Two monitoring agents work in conjunction with prefecture level agronomic staff from the Ministry of Agriculture to gather the market information, which is assessed in three markets per prefecture. The information is collated and disseminated on a biweekly basis. The information is provided as high, low, and current prices (Table 7) and graphically to show the biannual trend (Fig. 14). These data sets therefore provide the current situation and also give details of the temporal and spatial times series data sets for the country.

The objectives of the project are to:

- Detect areas of food insecurity as revealed by price values and trends.
- Indicate the potential surplus rural areas to supply the urban areas and other rural deficit areas through the private sector, by means of information about price differentials and transfer costs (food security).
- Build a statistical baseline to understand the household economy and coping strategies, and therefore program suitable food security action plans.

The price database covers

- Pre-war (1994) market prices (source: Minagri reports and Michigan State University reports).
- Current pices gathered by the "correspondants agricoles" (Minagri prefectoral reporters, supported by PASAR).
- Prices gathered by two independant monitoring agents from 33 markets in Rwanda, which includes 3 markets per prefecture (information publicated in the ad hoc bulletin).

The information is processed for:

- The publication of a regular market price bulletin, which provides both historical and geographical price aggregations. In addition to theses analyses, the bulletin provides information on the relations between industrial and locally

manufactured products and price differentials between processed and nonprocessed commodities.

- The Ministry of Finance use the price data in their calculations for the Commodity Price Index (CPI) and for general food security analysis.
- Minagri use the data for food security analysis and costs of key agricultural inputs.
- Traders and NGOs are using the information in their trading activities, market planning, and food security analysis.

The information is disseminated using a range of forms including:

- Fax
- E-mail
- Mail
- Bulletins
- Newspapers
- Radio

Regional collaboration

The information from the PASAR project has been made available to the Foodnet project and some of the data is already available on the Foodnet website, www.cgiar.org/foodnet. In the future, it is hoped that this information site will be used more extensively to provide both long-term and short-term data on the website and that this will form the basis of a more regional program for market information.

The future for the PASAR project

Although the PASAR price collection system was established to provide food security information, it will not take much more adjustment to provide more market oriented trade information using the system, which is already in place. It is envisaged that in the next phase of this project that the provision of market information will take a higher priority and then the project will focus on a less extensive range of commodities and increase the rate of data dissemination. At this time, the project will also be in a better position to play a more active role in the provision of trade information to promote both internal and regional trade.

Table 6. The PASAR projects list of commodities for which prices are collected in Rwanda.

Acronyme	Français	English	Kinyarwanda
SOR	*Sorgho rouge*	*Sorghum*	*Amasaka*
MAI	Maïs	Maize	Ibigori
F MAI	Farine de maïs	Maize flour	Ifu y'ibigori
RIZ	Riz	Rice	Umuceli
BLE	Blé	Wheat	*Ingano*
F BLE	Farine de blé	Wheat flour	Ifu y'ingano
MAN	Manioc	Cassava	Imyumbati
F MAN	Farine de manioc	Cassava flour	Ifu y'imyumbati
PAT D	Patate douce	Sweetpotato	*Ibijumba*
PDT	Pomme de terre	Irish potato	Ibirayi
BAN F	Banane fruit	Banana fruit	Imineke
BAN C	Banane à cuire	Cooking banana	Igitoki
HAR	Haricot	Bean	Ibishyimbo
PPO	Petits pois	Garden peas	Amashaza
ARA	Arachide décortiquée	Groundnut	Ubunyobwa
SOJ	Soja	Soy Bean	Soya
AUB	Aubergine locales	Egg plant	Intoryi ntoya
CHO	Chou	Cabbage	Amashu
OIG	Oignon rouges	Onion	Ubutunguru
TOM	Tomate	Tomato	Inyanya
COU	Courge	Squash	Igihaza
VIA	Viande	Meat	Inyama (Imvange)
POI	Poisson	Fish	Indagara
LAI F	*Lait caillé*	Soured milk	Ikivuguto
LAI P	Lait en poudre	Powdered milk	Amata y'ifu
OEU	Oeuf	Egg	Amagi
BIE B	Bière de banane	Banana beer	Urwagwa
BIE S	*Bière de sorgho*	*Sorghum beer*	Ikigage
PRI	Primus	Primus	Pirimusi
HUI	Huile de palme	Palm oil	Amamesa
SEL	Sel	Salt	Umunyu
SUC	Sucre	Sugar	*Isukali*
THE	Thé	Tea	Icyayi
CAF	Café parche	Coffee	Ikawa
CHA	Charbon de bois	Charcoal	Amakara
MOJ	Main d'oeuvre journalière	Day laborer	Nyakabyizi
	Denrée non disponible	Nonavailable foodstuffs	Igihingwa kitaboneka kw'isoko

Table 7. Prices from PASAR Project market sites in Rwanda.

(M I N A G R I [République Rwandaise Action Programme] Market price /114 Period from 11/22/99 to 12/3/99 P A S A R)

Comparison of present average market prices at prefecture level with the prices of the previous 2-week period and the prices over the same period last year.

Prefecture	Average sorghum			Average beans			Average maize			Average sweetpotato			Average cassava			Average banana		
	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current
Butare	93	103	108	150	127	123	58	80	73	17	27	27	53	78	78	58	53	48
Byumba	80	100	105	165	115	110	88	95	90	11	30	28	60	100	100	17	53	48
Cyangugu	100	117	120	147	110	110	100	73	83	25	17	17	43	47	50	37	26	22
Gikongoro	93	107	117	150	130	123	53	88	85	22	18	19	68	67	72	52	47	50
Gisenyi	97	105	103	133	115	107	82	85	82	35	18	15	80	68	68	29	47	43
Gitarama	88	98	107	150	123	117	65	83	70	17	27	28	48	68	70	47	48	57
Kibungo	68	98	97	163	113	110	77	130	125	9	42	36	57	100	98	13	40	37
Kibuye	92	100	105	173	110	105	80	72	78	11	11	11	55	57	57	15	32	30
Kigali rurale	68	100	105	137	113	117	68	95	80	19	32	30	50	78	70	40	47	42
Kigali ville	103	123	113	150	140	117	–	145	135	42	38	42	75	88	100	57	70	75
Ruhengeri	93	103	100	147	113	97	68	92	78	26	18.	14	78	88	75	24	45	48

Table 7. Continued

Prefecture	Average potato			Average groundnut			Average onion			Average rice			Average tomato			Average cabbage		
	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current	Prev year	Prev 2 weeks	Current
Butare	80	47	45	370	367	353	200	187	190	207	207	210	70	57	67	38	32	28
Byumba	65	43	38	400	390	390	215	190	190	215	220	220	88	50	65	58	28	23
Cyangugu	63	43	40	373	327	330	200	158	188	193	203	197	73	60	67	47	20	20
Gikongoro	53	43	37	417	360	347	217	197	203	230	227	240	50	67	90	50	22	18
Gisenyi	47	27	21	370	347	307	200	210	210	230	227	227	77	83	95	40	20	18
Gitarama	62	47	40	367	363	340	233	182	187	200	230	223	30	43	67	38	33	28
Kibungo	75	58	43	383	387	373	193	193	187	197	213	220	90	42	50	43	28	26
kibuye	53	32	26	433	343	350	217	177	187	220	220	220	97	47	63	37	27	22
Kigali rurale	83	40	37	393	393	367	220	180	165	240	243	237	47	43	70	47	32	30
Kigali ville	70	45	35	400	360	353	250	210	210	220	220	227	73	62	97	53	47	35
Ruhengeri	52	30	25	373	310	313	200	200	200	213	227	227	98	46	65	35	21	14
Umutara	67	63	45	393	417	417	202	200	150	227	247	247	97	43	60	40	38	32
Rwanda	64	43	36	389	363	352	212	190	189	216	224	225	74	54	71	43	29	25

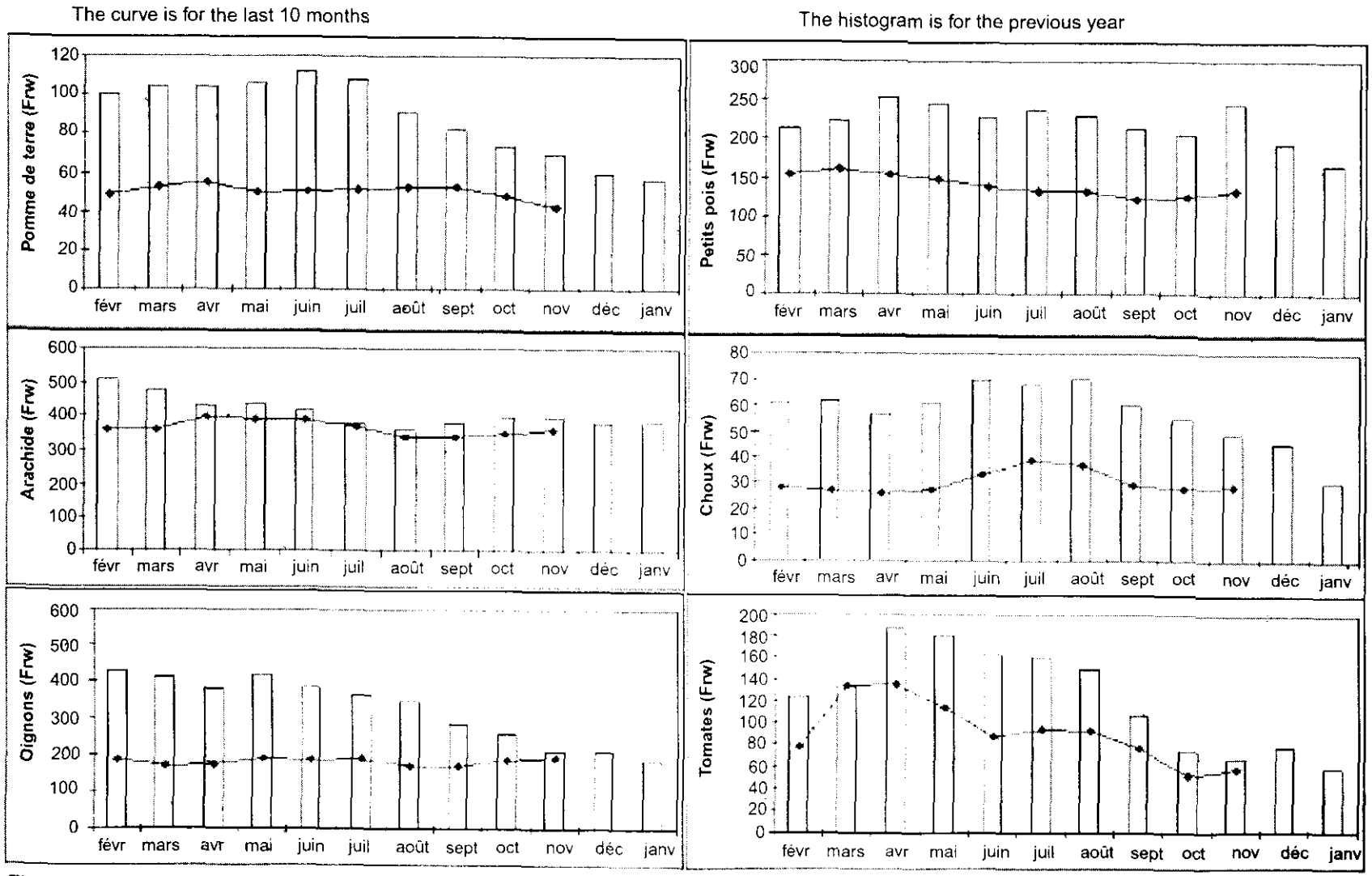


Figure 14. Price trends for selected products over the past 2 years.

Session VI

Discussions on the prospects for regional market information

The debate on the regional prospects for marketing information initially focused on the different approaches being used by the three countries.

Tanzania

The first paper from Tanzania outlined the more classical approach to Government led market information services. The Tanzanian Marketing Development Bureau (TMDB) has more than 70 full-time field staff and a number of senior staff in Dar-es-Salaam to administer the system. The system obviously has high overheads to sustain a workforce of approximately 100 persons, who need to be provided with offices, salaries, pensions and, in some cases, vehicles.

The data collection system has problems in keeping timely records and there is considerable loss of data caused by field staff not being able to electronically transmit their information to the central office in Dar-es-Salaam The data collation system is also outdated in terms of software, currently the TMDB is using an old DOS version of Lotus 1-2-3 to input data and the computer hardware is not Y2K compliant. The system is clearly suffering from the typically public sector problems of high overheads and low investment, which in turn leads to poor services.

Despite these problems, data collection and analysis continues and according to the survey reports by both the marketing bureau and a recent VOCA study (Annex 6), the Tanzanian system is still functional and provides a service, which clients use and appreciate.

The future of the TMDB is uncertain as the service is relatively costly and the Government has plans to privatize the marketing bureaux. This means that within 2 years, the marketing bureau will have to be self funding and sell its information to the clients. Although privatization is the approach being used by most governments in the region, it is unclear whether privatizing the market price service will be feasible in Tanzania in its present form or whether, the private sector is yet strong enough to support such a program.

The debate as to the need for more regional exchange of information was welcomed by the speaker and some information was given to the Ugandan MIS team to reformat and publish on the regional Foodnet website. More data could be made available, but the TMDB was at that time having hardware problems and was unable to access much of its electronic datafiles.

The Kenya Agricultural Commodity Exchange (KACE)

The commodity exchange approach presented by KACE was given much time for debate and the view was clearly expressed from the floor that this was an exciting and novel approach which was clearly private sector driven, rather than being a program developed by the state. Commodity exchanges have been established across the world

as places to increase the efficiency of trading and to set bench mark prices. The idea is certainly very attractive but there are certain prerequisites, which should be met prior to the successful establishment of a bone fide exchange.

The question arises can countries such as Kenya or Uganda sustain a commodity exchange? Commodity exchanges can only function in certain market conditions. Almost all commodity exchanges have been established by private-sector initiatives. This usually happens when the number of buyers and sellers grows too large to for one-to-one transactions to be quickly and efficiently executed. If, for instance, there are 100 sellers of maize and 100 buyers of maize all wishing to do business at the same time, it would take a great deal of time and cost for each party to meet to exchange offers and bids for maize and to use those buying and selling commitments with other potential contracting parties to drive a better bargain.

In the normal model of a commodity exchange, buyers and sellers give their buying and selling orders to a limited number of brokers who aggregate the buying and selling orders and execute them in bargaining sessions with brokers acting for other clients. The price at which these transactions are executed becomes a benchmark price for that particular commodity at that particular time. Trading volume has to be sufficiently large to provide enough commission to brokers to enable them to earn a living and pay for the administration of the exchange.

The quality, quantity, location, and delivery time of the commodity in question has to be precisely defined for the benchmark price to be meaningful. Let us take the example of Uganda, where, apart from coffee, whose international price is determined outside the country, the country produces surpluses of only very few commodities significantly large enough to justify the establishment of a classical commodity exchange to trade them.

It should be noted that without strict regulation, commodity markets are prone to manipulation, tax evasion schemes, insider trading, and wild speculation by people who cannot afford the losses they make. These conditions may be particularly prevalent in exchanges which are led by the public sector.

Quality control is an essential precondition to formal trading systems of this kind. Very few actors in the local agricultural sector have access to the sophisticated testing equipment necessary to specify the exact quality of any agricultural product. This is why expatriate organizations such as SGS, who specialize in quality control are commonly used for internationally traded goods. Farming in much of East Africa takes place in very small units. Seeds, farming methods, packing, and storing differ from farm to farm. The quality of every commodity produced varies very widely with hardly any two batches being the same. Even if quality control could be established well enough to ensure that all parcels of a commodity traded under a specific contract were of the same specification, it is unlikely that these standards would be recognized internationally without further costly testing by the recognized companies in this field.

The authority of a commodity exchange depends also on the integrity of documents of title. The security of the warehouse in which the commodity is stored and proof of

ownership imply a high degree of legal and banking control and efficiency. In the developed world, and in certain other countries where modern farming methods are used, large farming units together with standardized farming techniques and mechanical farming methods ensures the production of huge quantities of homogeneous products that is best marketed through a formal exchange. Few of these conditions apply to the agricultural sector in East Africa.

The question needs to be asked why would a country like Kenya or Uganda need a commodity exchange? These countries are well endowed with market places. The number of wholesale traders is few and those that operate are able to procure and sell all the commodities they can handle. It is true that transaction prices are not publicly accessible but much more transparency could be achieved without the tremendous cost of establishing a commodity exchange. Quality inspection in markets and a statutory requirement of market managers to report volumes and prices would go a long way to producing more competitive markets and ensure higher volumes of trade and lower transaction costs.

The question of exchange of regional information was particularly relevant to the commodity exchange idea, and KACE is keen to develop regional linkages for flow of trade information. The problem at present is that the KACE project is underfunded and it does not at this time have an e-mail or website in which to exchange information. It also does not have long-term records or easy access to weather data and trade information from other regional and international sources. Clearly, start up funds are required for KACE to begin operating on a national level, before it can then expand to the regional system.

The debate on the need for a commodity exchange and the type of exchange which may be best suited to the East African situation generated much interest and is a topic that clearly needs further investigation. At present, the KACE proposal remains on the shelf, awaiting a donor to start up the system. Clearly the government should contribute to such a system if it is to develop, but the Government should not implement such a system or be the controlling agency. Commodity exchanges already exist in South Africa and Zimbabwe and perhaps discussions with these countries may provide more insight into the conditions required for a commodity exchange and the status of the market information service that needs to be established before such as system is viable (Annex 6).

Rwandan marketing information service

The discussion on the Rwandan project focused mainly on the future of the project and how it will be transformed when and if the project is continued into a next phase. The project in its current form will need to be significantly increased in terms of staff and logistics if it can start to play a real function in the trade sector. However, the initial framework is in place and would not take a great deal of organization to provide a more robust national system.

The question of regional exchange of information is important and interesting for the project and PASAR has already made data available to the Foodnet team to

provide Rwandan market price data on the Internet. The PASAR project also provides bimonthly updates of the price information, which is circulated via e-mail and therefore can easily be formatted into the regional price system.

Rwanda is also fortunate in that there are several other agricultural support projects ongoing that would provide PASAR with useful trade information. USAID is currently funding a number of market studies which may also provide useful background information for a trade information service.

Conclusion to the regional session

The regional trade session showed a real range of approaches being used for market information in the region and this indicates some of the problems in setting up a regional service given the range of information methods being employed. This meeting was, however, one of the first in which the methods were discussed at the regional level and this may be considered as a starting point in the process of developing regional data support systems.

Technologies are available to set up a regional system and there was considerable good will in making information available. The next task is therefore to follow up with the various agencies to set up common goals, some systems for regular data exchange, and thereafter work towards the establishment of a regional pricing system and when this has been successfully completed, to establish a regional center for trade information.

Session VII

Viewpoints from the farmers

Market information meeting held with farmers at the Kyotera Milano Hall, Rakai District

Organisers: Irish Foundation for Co-operative Development (IFCD)

Fred Bikande

IFCD Marketing Information Officer

The purpose of the meeting in Rakai was to discuss the findings from the main stakeholders' meeting in Kampala, with the IFCD program and their farmer associations. The aim was to discuss the ideas debated in Kampala and gather information from farmers as to their views and their needs for the proposed micro-scale marketing information service.

IFCD, an NGO based in Ireland, is working to strengthen farmers' cooperatives and associations. In Africa, IFCD is working with farmers' groups in Tanzania and Uganda. The aim is to develop cooperative links within the farming communities and strengthen their bargaining position and basically enable the many small farmers to gain from some form of increased scales of economy. The first stage in the process is to build more robust farmer associations through actions such as enhancing access to credit, providing groups with guidelines for cooperative organization, and to assist the farmers in the mechanisms of collective marketing. IFCD has been working in Tanzania for the past 10–15 years with considerable success and started their work in Uganda 2–3 years ago.

The strategy being used by IFCD is not new, as cooperative movements are common in most parts of the world. However, developing collective marketing associations is particularly relevant to Uganda at this time, due to the recent history of the country. Prior to market liberalization, the Uganda agricultural sector was dominated by a series of commodity specific cooperatives. As a result of the civil war, the changing economic and policy environment, cooperatives became increasingly unreliable and in the late 1980s early 1990s, corruption was endemic. At the time that farmers lost faith in the cooperative system, the government was also forced to dissolve the commodity boards as part of the IMF reform package. This left most farmers without any kind of marketing support. The role of IFCD is therefore to put back in place the useful aspects from the cooperatives, but also put in place simple mechanisms to avoid the problems of financial mismanagement that dogged the previous cooperative movement.

At the Rakai meeting farmers were represented by three associations, which are working with IFCD, a list of participants is given in Annex 3. The three associations are the Kyazanga savings and credit society, the Addingana credit and savings society, and Kifamba growers cooperative.

The aims of developing an improved market information service are to:

- Assist farmers in getting reasonable amounts of money from their produce.
- Provide market information to farmers.
- Assist in developing new markets.

The main objectives of the meeting were to:

- Discuss the ideas raised at the Kampala meeting.
- Hold a question and answer debate to share experiences with farmers and discuss ways to improve market access and basically enable farmers to get better prices for their produce.

Question and answer session

Why/how did farmers come together as group members and decide to market their produce together unlike in other parts of Uganda?

- Farmers used to have problems in earning money for solving their individual problems.
- The aim of the marketing groups was to reduce the number of middlemen *Ddebe* and it was for this reason that the marketing groups were formed.
- The farmers also wanted to have a better bargaining power for their produce.

Given the problems in Uganda, which led to the general collapse of the cooperative system, how did the group come to trust each other as group members?

- There was a lot of education from IFCD and many meetings were held to sensitize the members about the benefits that can be gained when working and selling together.

Addigana Co-op—For trust to develop we needed to work on the principles set out by the IFCD. These include:

- Openness, both successes and failures are reported. If there are problems we meet to discuss these issues.
- Careful division of labor during purchasing and selling, i.e., the same person is not involved with buying and selling, more than one person is involved with each transaction.
- Informing members of where goods/produce have been sold. Reports on sales are given to the group and these reports can be checked by the membership.
- Sales information is open to all members; this is essential if we are to have transparency.
- The funds raised through trading are kept in the Centenary Bank.
- There has been a need to be strict about the quality of members—only trusted members with a good reputation are allowed to join. This is important because the group is held responsible for any bank loans and credit schemes and therefore we can only allow responsible people join this type of arrangement.

What types of assistance are offered by IFCD?

- At the outset of the IFCD program in1998, each of the groups were given a matching grant, i.e., the amount the group raised or had available as their working capital was matched by IFCD. This was a form of start up capital. Now IFCD does not provide grants but is instead a source of information and guidance.
- The poverty alleviation program (PAP) offers credit to individuals who are cooperators and this is also used to raise capital.
- IFCD offers guidelines on how to set up and manage a cooperative and how to deal or negotiate with other cooperatives.
- IFCD has employees who are in contact with farmers at all times at no cost.
- IFCD are the providers of market information and training and they recommend or give guidance on quality standards.

Can you explain the matching grant in more detail?

- The grant is a boost to groups that perform well, a sort of encouragement.
- Each group was given the start up grant once.
- The grant was given on a 1:1 ratio and the amount given depends on the money in the group's account.
- The grant was given to facilitate groups to buy produce, i.e., it's a start up fund for bulking the produce.
- The main types of trading were done with beans, maize, and coffee.

What types of assistance are required?

- Further training from IFCD especially in quality standards of produce.
- Constant delivery of market information—we need to know what is happening in the market, how things are changing, and the market opportunities.

What are some of the problems you face in marketing?

- Access to transport and high transport costs.
- Lack of storage facilities.
- Capital hindrances to loans from banks.
- High interest rates.
- No grace period given.
- Collateral security.
- Penalties when we do not meet the payments.

What types of information would you want from the IITA MIS?

The farmers indicated that they needed more trading information including:

- Up-to-date prices
- Lists of buyers and some information about the buyers, i.e., their purchasing power and their reliability if known.
- Quantities in demand
- Terms of payment.
- Information on quality standards including premiums for specific types of commodity.

All of this information should be channeled through the IFCD offices to its coordinators and extension staff. From there it can either be collected directly by farmers or provided to farmers through IFCD agents.

Would you prefer the information to come directly to IFCD or just over the radio?
Providing marketing information over the public media is likely to intensify competition that may not be good for our group. However, it may be useful to all farmers, but it will again depend on ability to react to the information, it may not benefit the developing marketing groups to the same degree.

How do you bulk your commodities?
The marketing groups have other smaller groups, which they buy from. These people can join the membership, which is voluntary, but members should agree that a person is responsible.

What do you think you would like to do in the future, if business expands?
The group members have a vision of forming trading companies, setting up larger storage facilities, having storage facilities in Kampala, and also buying a lorry, but the limiting factor is capital.

Before marketing with IFCD you were marketing with local traders, what happened to them?
The local traders are still in the village and they are friendly. In some respects we still deal with them when there are no alternative markets but where possible we go through IFCD as we get better markets through the collective marketing system. The local traders are friendly, as they need to have the market information from the farmers.

What sort of quantities do you anticipate for bean sales in season "B–99"
- Kasambya–100 t
- Kifamba–80 t
- Addigana–60 t

What sort of quantities do you anticipate for maize sales in season "B–99"
- Kasambya–150 t

Participants questions

Is there a market for bananas?
There is a market for bananas in Kampala, but it may be easier to sell into Rwanda. We could try to provide you with names of buyers in Kigali and Kampala, when you have produce ready for sale.

Are there any buyers for beans at the moment?
The buyers are there but the prices offered are very favorable. We can provide daily Kampala prices for you to assess the situation.

How do we deal with buyers who change prices after delivery?
Always be sure of whom you are selling to and avoid buyers who are not straightforward or get the price in advance of the paying date.

Annexes

Annex 1. Abbreviations and Acronyms

ACDI	Agricultural Cooperative Development International
ADC	Agri-business Development Center
APSEC	Agricultural Policy Secretariat
ARDC	Agricultural research and development center
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
AVSI	Association d'Volunteer Service Internationale (Italian cooperation)
CBOT	Chicago Board of Trade
CDF	comprehensive development framework
CGIAR	Consultative Group on International Agricultural Research
CMIS	Commodity Marketing Information Services
COMESA	Common Market for Eastern and Southern Africa
COMIS	Commodity exchange and marketing information service
CPI	commodity price index
CTA	Centre for Technical Assistance (The Netherlands)
DANIDA	Danish International Development Agency
DFID	Department for International Development (UK)
FAO	Food and Agriculture Organization (of the UN)
FEWS	Famine Early Warning System (Uganda)
GDP	gross domestic product
GoU	Government of Uganda
IDEA	investment in developing export agriculture (Uganda)
IFAD	International Fund for Agricultural Development
IFCD	Irish Foundation for Cooperative Development
IGAD	Intergovernmental Group Authority on Deveolpment
IITA	International Institute of Tropical Agriculture
ISC	IDEA steering committee
ISP	Internet service provider
KACE	Kenya Agricultural Commodity Exchange
MIB	market information bureau
MIS	market information system
MNS	market news service
MTN	Mobile telephone network (Ugandan mobile phone service provider)
NARO	National Agricultural Research Organisation (Uganda)
NCPB	National Cereals and Produce Board (Kenya)
NRI	Natural Resources Institute (UK)
NTAE	nontraditional agricultural exports
PAP	poverty alleviation program
PASAR	Rwandan Food Security Project

PC	principal center
PEAP	policy for the eradication of absolute poverty (Uganda)
PMA	Plan for the Modernisation of Agriculture (Uganda)
RCIS	regional commodity information system
RCTIS	regional commodity trade information system
REDSO	Regional Economic Development Services Office (USAID-Nairobi)
SC	subcenters
TMDB	Tanzanian Marketing Development Bureau
TMIB	Tanzanian Market Information Bureau
UCDA	Coffee Development Association
UN	United Nations
UNCTAD	United Nations Council for Trade and Development
UNDP	United Nations Development Program
UNFA	Uganda National Farmers' Association
USAID	US Agency for International Development
WFP	World Food Program
VOCA	Volunteers in Overseas Cooperative Assistance

Annex 2. Participants at the Kampala Meeting

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Annex 4. Uganda agriculture production and trade forecasting meeting

IDEA/FEWS project offices
Prince Charles Drive, Kololo
Kampala, Uganda
3 December 1999

Rainfall (Appendix 1): summary of 1999

Western, southwestern, and southern districts

Western and southwestern regions experienced extended dry conditions for the first 7 to 8 months of 1999 when patchy rainfall was received resulting in lower than normal crop and livestock production. As a result, households depended on stocks from past harvests and access to markets, which functioned normally although a slight increase in price levels was observed. Pockets of household food insecurity were reported and these could be taken care of through community response methods without need for external intervention. After August, a slight increase in rainfall distribution was registered until October when well-distributed rainfall was received in most of the districts. Slow progression of second season rains led to nearly three months (September to November) of protracted sowing of crops as farmers tried to "catch the season" to make up for lower than normal first season production. By late October, harvest of short-cycle second-season crops, such as Irish potatoes and beans, had started. Late-planted crops are likely to suffer moisture stress if rains withdraw by mid-December as predicted by the Department of Meteorology.

Over the two seasons, counties in districts bordering Tanzania, such as Rakai, have experienced mixed rainfall conditions that limited crop development. This has resulted in mostly low production, affecting livelihoods. However, no major food problems have been observed. More than 60% of the population in Bundibugyo District remains displaced in camps in the district and only a few households had access to land and were able to cultivate this season. This is the third consecutive period of low cultivation since mid-1998, implying continued and increased dependency on food aid for residents.

Eastern, central, and northern districts

Generally, experienced average to above average rainfall for both seasons, promoting farmers' crop cultivation activities. As a result, near normal harvests have been realized over the year. The relative calm in northern Uganda, that has been experienced since mid-1998 with no major insecurity problem, enhanced the resident population's access to arable land for cultivation hence increasing area cultivated and production. Rains were expected to end in mid-November.

Much below normal rainfall in northeastern Uganda's (Kotido, Moroto districts) only season resulted in near total crop failure. Market supply remains poor, mostly dependent on inflow of commodities from outside the region, due to uncertain security. The Lutheran World Federation indicates that the sale of cattle, at lower than normal

prices, is on the rise as households endeavor to purchase cereals to meet their food requirements. A joint assessment led by the World Food Program is to be carried out between 5 and 11 December 1999 with a report due mid-December.

Second season harvest, market supply, relief needs, trade opportunities

The bean crop for the second season is secure with normal production expected in eastern, central, and northern districts where the harvest began in October and the main activity is threshing and drying of the crop in fields (Fig. 1). Approximately 128 000 t of beans are expected for this season. Continuing rains, however, are increasing farmers and agricultural officials' concern for likely reduced quality. Favorable growing conditions and or security in Gulu, Kitgum, and Lira districts enhanced farmers' cultivation activities for the "Lira" bean, which are mainly available for the relief market. Cultivation of other varieties of beans is low.

Market supply of maize remains good since the last harvest in July. By week 49, more than 90% of the maize was secure having passed the critical development stages. Early production estimates for maize indicate as much as 176 400 t may be realized from the second season. Of this amount, 80%, approximately 141 120 t, may be available for the market in addition to 66 000 t out of Kapchorwa's single long season, giving a total marketable surplus of 207 120 t. Nevertheless, this season's maize crop is not expected to enter the market until the last week of December when the initial dry crop will be available. Figure 1 highlights the harvest trends for both crops.

Relief needs

In following up assistance to districts that experienced extended dry conditions in the first 7 to 8 months of this year, the Ministry of Disaster Management and Refugees is purchasing maize and beans for supply to an estimated 700 000 people in the most affected 28 districts. By November, the ministry had acquired UShs1 billion for purchase of food—about 200 t of beans and 500 t of maize had been purchased by December. A further UShs1.5 billion for purchase of maize and beans may be ready anytime from Ministry of Finance allowing a total of approximately 6000 to 8000 t of food procurement by the Government of Uganda.

The World Food Program has indicated its intention to buy 5000 t of maize by the end of January 2000 when supply of maize increases and quality is good. Other opportunities available for trade include tenders for supply of 300 t of beans and 500 t of maize every month to the Ministry of Defence.

Regional situation

Trade in beans has increased since early November as the dry pulses started entering the market. A marked rise in cross border trade has been reported at Malaba with beans crossing from Uganda into Kenya, where a deficit in production is attracting a lot of Uganda's produce. Current prices offered on the Kenya side range between UShs290 and 320 per kilogram. However, the moisture content is still high at between 16 and 20%.

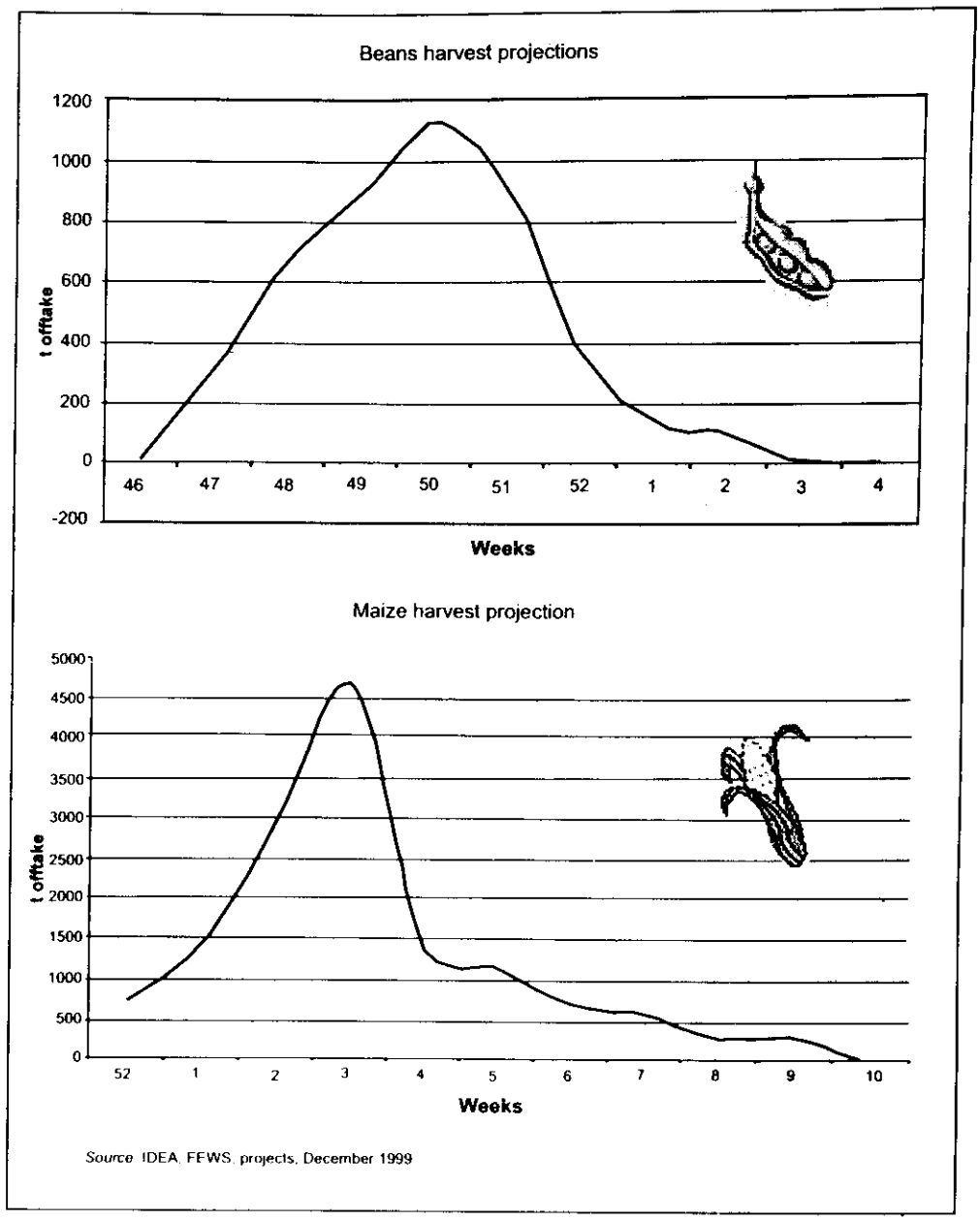
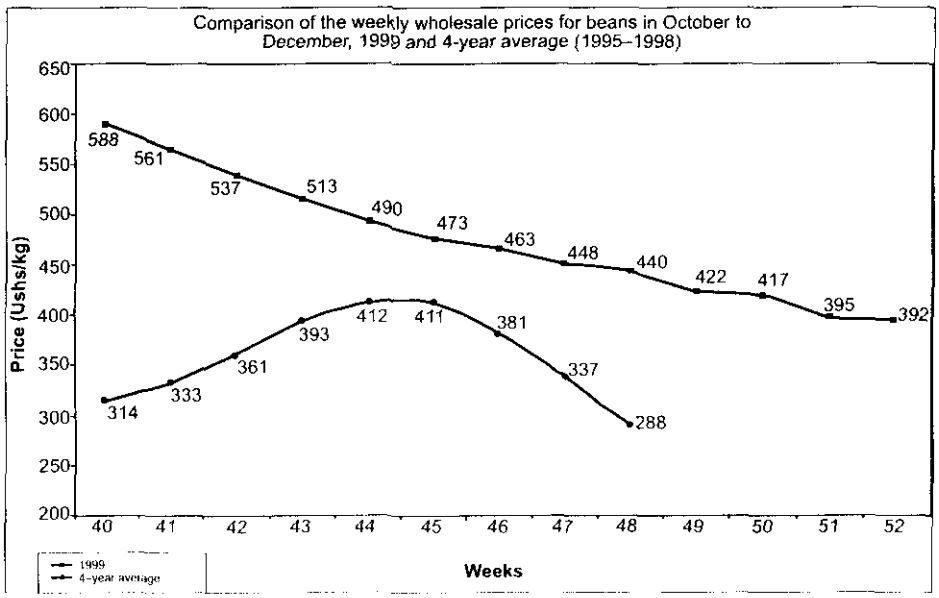
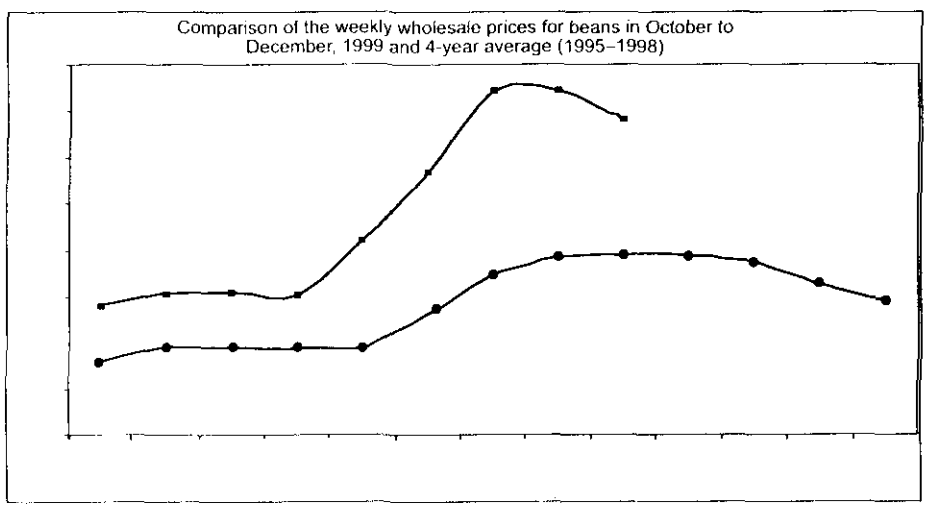


Figure 1. Bean and maize seasonal projections.





Source: The market information system, International Institute of Tropical Agriculture, IDEA and FEWS project, December 1999

Figure 2. Beans and maize weekly price trends.

By August, a combination of poorly distributed rainfall and limited agricultural inputs led to a projected maize deficit of 472 000 t for Kenya for the period July 1999 to June 2000. An estimated 80 000 t in maize imports from Uganda and Tanzania contributed to reducing the deficit to 392 000 t by October 1999. It is anticipated that a large proportion of Uganda's second season maize, as much as 80 000 t, will go towards further offsetting the Kenyan deficit, mostly through informal trade. Since mid-1999, Kenyan traders have been based in Uganda, actively buying maize and its by-products. Maize imports are also expected from Tanzania as well as South Africa and the US, which are expected to make up for Kenya's deficit. The Government of Kenya's continued implementation of non-COMESA membership tariffs favors Uganda's trade although improvement in quality is very important if Uganda is to remain competitive. Still no formal trade has been concluded between Uganda and Kenya.

A large bean deficit—and particularly demand for mixed bean varieties—in Rwanda has provided a good market for the "Lira" beans and about 720 t of mixed beans have so far been purchased for use in Rwanda to meet the shortfall. This has helped reduce stocks for a product that has a limited market outside the northern region. As purchases continue, World Vision International, one of the NGOs working with farmers in Gulu and Kitgum districts reports that significant tonnage may be available for sale from the second season production alone. Following a recent issuance of a tender by the Government of Rwanda for supply of 1500 t of beans, farmers may be able to sell more of their produce to earn income.

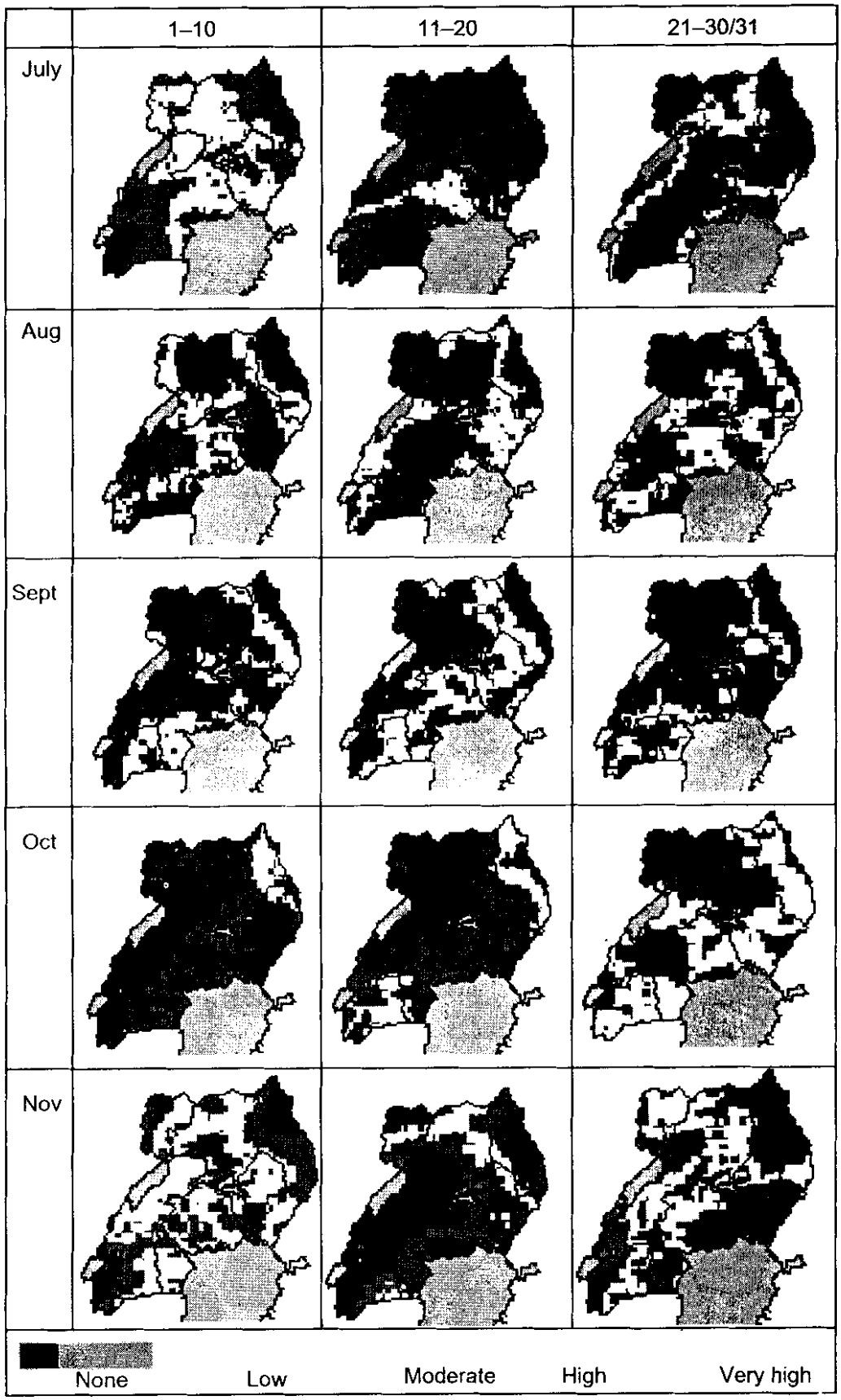
Beans

Though a small rise was noticed due to sale of the commodity to Rwanda, reigning bean prices are lower than the average observed for the last 4 years and are expected to reduce further as the supply from the recent harvest comes to market. The low prices are conducive for stockists, who plan to sell later at higher prices, and relief agencies (Fig. 2).

Maize

In contrast to beans, maize prices are higher than the average for the last 4 years due to high demand from Kenya and Rwanda. Expectations for a drop in prices are low because the demand is still very high. The high price per kilogram of maize, UShs200–300 provide impetus for producers in Uganda and this may "jump start" cultivation for the first season of 2000 (Fig. 2). (Next meeting 14 January 2000.)

Appendix 1. Rainfall estimation based on meteosat imagery



Annex 5. Agribusiness Development Center (ADC)

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ADC Bimonthly market report
29 Nov–12 Dec 1999

This report represents our first report since the rejuvenation of our market information service. We are happy to have as partners the IITA–Foodnet market information service providing regular field data, as well as an enhanced regional team. Please let us know how you feel about the new format, and don't hesitate to give us your feedback—good or bad! This report will be distributed by e-mail and also posted on the Foodnet website www.cgiar.org/foodnet . For more information and comments contact Ms. Harriet Nsubuga.

ADC/IDEA project-MKIS

1.0 Weekly average exchange rates by 10/12/99

	Spot	Prev. wk.		Spot		Spot	Prev. wk.
	10/12/99	3/12/99		10/12/99		10/12/99	3/12/99
Usd/Ush	1506.35	1506.11	Usd/Dem			1.91	1.94
Usd/Ksh	74.59	74.75	Ksh/Ush	20.2	Usd/Gbp	0.61	0.63
Usd/Tsh	795.00	797.27	Tsh/Ush	1.89	Usd /Euro	1.02	1.01

Comments: The Ugandan currency depreciated slightly by 0.02% from 1506.11 to 1506.35. On the other hand, the Kenyan and Tanzanian Shillings appreciated slightly by 0.21% and 0.29%, respectively. The Deutschemark, the Pound Sterling, and the Euro also appreciated slightly.

Source: Bank of Uganda, External Operations Department.

2.0 Weather conditions, crop production, and marketing

Uganda

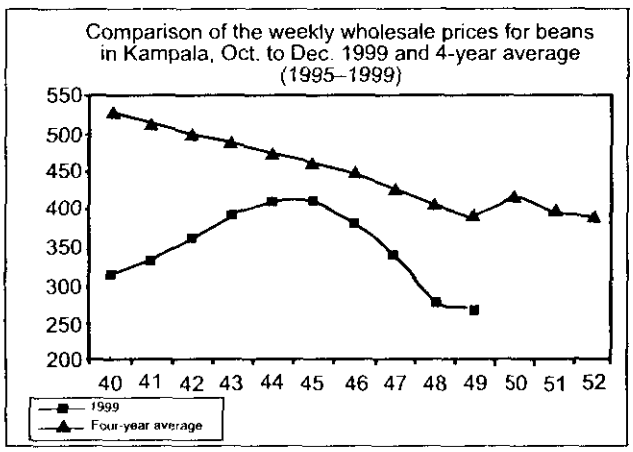
Weather

A reduction in rainfall was noted by the end of November for several parts of Uganda, especially northern Uganda, marking an early end to the season as predicted by the Department of Meteorology. Well-distributed rainfall was reported for districts in western, southwestern, and northwestern regions. The onset of dry conditions is conducive for proper drying of mature and harvested crops and improvement in quality of produce. Ample rainfall in October and November replenished soil moisture and helped support late-planted crops in southwestern districts.

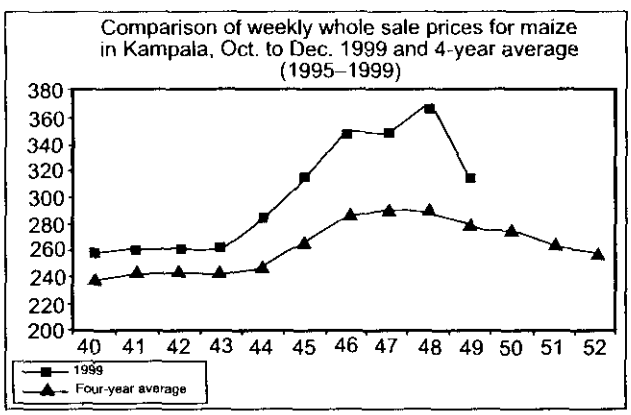
Crop production

By early December, precipitation levels were markedly reduced in most districts, prompting farmers to enhance harvesting activities of their crops especially maize since the beans were harvested earlier. In the North, East, and central regions the main activities are harvesting, drying, and marketing of the produce. The southwestern region has not started harvesting since they planted late—at the end of September and beginning of October. Maize in Kasese was in a good condition and it was expected that this season's harvest would be better than that of the first season's; an estimate of 18 000 t. Harvesting is likely to be at the end of December or early January. The beans were already harvested and were selling between 200/= and 300/= per kilo by 3/12/99. In Mbale, some farmers had already harvested and sold off their produce.

Crop marketing



Bean prices had reduced further to 268/= per kilo by 10/12/99 as the new harvests came into the market. The bean prices were generally below the four-year average (1995–1999) which is due to good harvests received throughout the year. It is expected that the prices will decline further unless higher demand is realized from relief or export to neighboring countries now that the schools have closed. The prices are advantageous to those buying for stocking or relief.



Generally, the maize prices were higher than the four-year average (1995–1998) due to the high demand especially for export to Kenya. The prices came down to 312/= per kilo by 10/12/99 and are expected to reduce further as more maize is brought to Kampala. However, the prices might not reach the four-year average because there is still high demand for export to Kenya. Also the southwestern region has not yet harvested and is still relying on maize from the other regions.

The prices of beans are lower than those of maize in most parts of the country as shown in the graphs above. There was cross-border trade at Malaba, Busia, and Suam because the prices in Kenya are higher than those in Uganda. The price of maize was 23 000/= per bag in Kenya via Suam by 10/12/99. At Malaba border, it was reported that

cross-border trade was observed although at a reduced pace and the prices of a bag of maize and beans are given below.

	Kenya	US$/t	Uganda	US$/t
Maize	1000/=	$134.00	15000/=	$100.00
Beans	2000/=	$268.00	20000/=	$133.00

Through informal cross-border trade, the prices of maize were as low as US$ 100 per tonne.

Kenya

Rainfall was received in the central and coastal regions, which facilitated crop growth. Unfortunately, the northwestern and eastern regions were still experiencing drought. Much as some maize was harvested from the crop growing regions of the country, there was still a food shortage, hence, more trade is expected. Kenyan traders have crossed to Uganda to buy maize as far as Kigumba in the northwest and others were buying beans in Kampala where a tonne of beans costs approximately US$185 on 10/12/99. On the other hand, the bean prices were US$311 in Nairobi and US$297 in Kisumu during the same period. Tanzania was also exporting maize and beans to Kenya, therefore the imported commodities reduced the food shortage in the country. It is anticipated that approximately 80 000 t of the second season maize will be exported mainly through informal trade and so, further offset the food deficit in Kenya.

Tanzania

The areas in the North—Arusha, Kilimanjaro, and Tanga—experienced a poor rainy season because the rains were late and the farmers were not able to plant crops. On the other hand, the Lake region—Kagera and Mwanza—had a good season and a good harvest is expected. For the other regions, the season begins in November. Tanzania was still exporting maize and beans to Kenya because of the poor harvest in Kenya, however trade had slowed down. There was no cross-border trade to the Congo in spite of the high demand due to the trade restrictions. The southern region had a surplus of maize and the wholesale prices in Songea were US$65 per tonne compared to $130 in Arusha and $165 in Nairobi.

3.0 Market situation of maize and beans

3.1 Maize

		Ushs/t		US$/t	
	Uganda	Spot	Prev. wk	Spot	Prev. wk
	Market	10/12/99	3/12/99	10/12/99	3/12/99
FOT	Kampala	312 000	367 000	207.12	243.67
FOT	Jinja	280 000	280 000	185.88	185.91
FOT	Mbale	280 000	280 000	185.88	185.91
FOT	Masindi	200 000	250 000	132.77	165.99
FOT	Mbarara	310 000	320 000	205.80	212.47
FOT	Lira	220 000	250 000	146.05	165.99
FOT	Soroti	200 000	200 000	132.77	132.79

Source: IITA market information service, 1 and 8 Dec 1999.

Comments: Generally, the maize prices reduced in most towns during the 2 weeks, which was to the advantage of the traders. The volumes available tend to indicate that

some of the crop held back during the previous season was released as farmers prepare for the Christmas season. The new harvests are not producing high volumes of dry maize as yet. Mbarara still registers high prices because planting began in late September and hence, the harvests will be in January.

It is not competitive to export maize from Kampala to Kenya because the prices of Ugandan maize are 74% and 71% higher than those in Nairobi and Kisumu, respectively. However, it was observed that there was a lot of maize being ferried to Kenya, which means the traders devise means of reducing their costs. It would only be profitable for those involved in informal cross-border trade in Kapchorwa and Busia.

Regional		Spot	Prev. week
Kenya	US$/t	10/12/99	3/12/99
FOT	Nairobi	165.00	202.00
FOT	Kisumu	162.10	162.10
PORT	Mombasa	209.00	195.90

Source: Ministry of Agriculture Kenya—market information service.

Tanzania		Spot	Prev. week
US$/t		10/12/99	3/12/99
FOT	Dar-es-Salaam	115.00	115.00
FOT	Arusha (North)	130.00	130.00
FOT	Songea (South)	65.00	65.00

Source: Marketing development bureau.

N. America		Spot	Prev. week
US$/t		10/12/99	3/12/99
FOB	Chicago Board of Trade	72.94	74.11
	Premium river transport	13.00	13.00
FOB	US Maize—Gulf of Mexico	85.94	87.11

Source: Public Ledger, 10 December 1999.

Calculation of competitive export of Ugandan maize. (US$/t)

	Nairobi	Kisumu
Price: FOT Kampala	207.12	207.12
Official freight inland and clearing	75.00	65.00
Surveyor weight and quality certificate 1%	2.07	2.07
Insurance 1%	2.84	2.74
COMESA tariff 2%	2.87	2.77
	289.91	279.70
Price: FOT Nairobi		
Origin Uganda	289.91	279.70
Origin Kenya	165.00	162.10
Not competitive	124.91	117.60

3.2 Beans

Uganda		Ushs/t	US$/t		
		Spot	Prev. wk	Spot ($)	Prev. wk ($)
	Source	10/12/99	3/12/99	10/12/99	3/12/99
FOT	Kampala	268 000	278 000	177.91	184.58
FOT	Jinja	350 000	350 000	232.35	232.39
FOT	Mbale	300 000	300 000	199.16	199.19
FOT	Masindi	300,000	300,000	199.16	199.19
FOT	Mbarara	200 000	300 000	132.77	199.19
FOT	Lira	350 000	350 000	232.35	232.39
FOT	Soroti	400 000	400000	265.54	265.58

Source: IITA market information service, 1 and 8 December 1999.

Regional			Spot	Prev. week
Kenya	US$/t		10/12/99	3/12/99
	FOT	Nairobi	310.80	175.60
	FOT	Kisumu	297.00	324.30
	PORT	Mombasa	–	297.20

Source: Ministry of Agriculture, Kenya—market information service.

Tanzania		Spot	Prev. week
	US$/t	10/12/99	3/12/99
FOT	Dar-es-Salaam	280.00	280.00
FOT	Arusha	235.00	235.00
FOT	Songea	350.00	300.00

Source: Marketing development bureau.

International

N. America	Spot	Prev. week
US$/t	10/12/99	3/12/99
US No.1 Haricot beans (cif UK)	650	650
Dark red kidney beans (cif UK)	800	800
Black Eye beans (cif UK)	900	900

Source: Public Ledger, 3 and 10 December 1999.

Comments: The bean prices reduced or remained constant and this was the general situation all over the country. It is expected that the prices will reduce further as more bean harvests enter the market. The Kampala prices were low because it is a collecting center for most commodities from the districts.

Calculation of competitive export of Ugandan beans. (US$/t)

	Nairobi	Kisumu
Price: FOT Kampala	177.91	177.91
Freight inland and clearing	75.00	65.00
Surveyor weight and quality certificate 1%	1.78	1.78
Insurance 1%	2.55	2.45
	257.24	247.14

Price: FOT Nairobi

	Origin Uganda	$257.24	$247.14
	Origin Kenya	$310.80	$297.00
Competitive		–53.56	–49.86

Comments: It is profitable to export beans from Kampala to Kenya. The price of Ugandan beans was 21% and 20% lower than that in Nairobi and Kisumu, respectively. Ugandan traders face competition by traders from Arusha because of the cross-border trade to Kenya. The Kampala prices are 32% below the Arusha prices, however, transportation costs are lower from Arusha because it is nearer to Nairobi.

4.0 Major commodity prices: CIF Rotterdam (US$/t)

Goods	Origin	Loading	Spot	Prev. Wk	Remarks
			10/12/99	3/12/99	–
Maize	EU	Dec	142.14	142.14	–
Rice	Thailand	Jan	237.00	236.00	FOB
G.nuts	USA	Dec/Jan	950.00	950.00	–
Soya	USA	Dec	193.85	198.35	–
Soya oil	EU	Dec	369.00	386.00	–
Sun oil	USA	Dec	430.00	446.00	FOB Gulf
Sesame	Sudan	Dec	850.00	850.00	–

Source: Public Ledger, 10/12/1999 and Topfer International 7/12/99.

	Loading	US$/t	cts/lb	Ushs/Kg
Cocoa (CSCE)	Dec	845.00	–	–
Coffee (CSCE)	Dec	–	141.80	–

Public Ledger by 10/12/99.

Other major commodity prices in Uganda (US$/t)

Goods	Source	Spot	Prev. Wk
		10/12/99	3/12/99
Soybeans	Northwest	314.67	342.60
G.Nuts	Northwest	791.32	791.44
Simsim	North	630.66	597.57
Rice	Northeast	481.30	481.37
Millet	Northwest	265.54	265.58
Sorghum	Northwest	167.29	168.65

Source: IITA MIS, by 3 and 10 December 1999.
For any questions and comments contact the ADC market information services.

Annex 6. Needs/capacity assessment for a regional commodity information system

ACDI/VOCA Uganda office (Contact person D.Griffiths)
Host organization—USAID/REDSO/Nairobi
Commodity information users in Kenya, Uganda, Ethiopia, and Tanzania

Background

Liberalization of trade in the Greater Horn of Africa is leading to the dissolution of the state marketing boards that monopolized trade and information dissemination in the agricultural sector. This has created a situation where there are no central (national) information sources and the need for timely information now surpasses any period in the past. There is need for timely information on the quantity, quality, source, and prices of key agricultural commodities by all stakeholders in the agricultural sector. This information is especially required by governments for policy making and addressing private-sector initiatives and expanded markets, increased marketing efficiency in the region, and enhancement of food security—a top agenda item for most countries in the Greater Horn of Africa. The establishment of such a commodity market information system will allow producers and users of agricultural commodities to communicate more effectively and to quickly access market information that will facilitate the transaction process.

It was in the framework of the above understandings that the needs/capacity assessment of commodity sector stakeholders was designed and implemented.

Scope of work/terms of reference

Conduct a needs/capacity assessment survey including representatives of all stakeholder groups in the four countries: Kenya, Tanzania, Ethiopia, and Uganda.

The stakeholder groups were identified as:

- Commodity buyers and sellers
- Processors
- Farmers, cooperatives and associations, international organizations
- Transporters
- News media
- Internet service providers (ISPs)
- Government organizations

Design a prototype system that targets the identified needs and conforms to the information technology capacities in the region.

The initial two steps involved in the establishment of a regional commodity information system were completed: conducting a needs/capacity assessment and defining appropriate mechanisms for information transfer, and second, designing a regional commodity information system. The activities required to refine and launch the system are discussed in the recommendation section of the report.

The needs/capacity assessment phase of the project ascertained that there is clearly a need for timely information on the quantity, quality, sources, and prices of key agricultural commodities by all stakeholders. Current information providers, mainly government entities, lack funding and infrastructure to meet the needs of market participants. Many in the private sector, and indeed in government itself, questioned the accuracy of the information being released.

Based on the findings, the name, regional commodity information system was changed to regional commodity trade information system (RCTIS). The importance of trade linkages to almost all of the market participants (survey respondents) became clear during the study. Enhancing market efficiencies by facilitating links to buyers, sellers, and commodity service providers was the central requirement voiced by a majority of the 126 people interviewed. It also became apparent that governmental involvement (control) would severely limit private-sector participation in any eventual information system.

Summary of recommendations

The system must be:

- commercially viable
- supported by the private sector
- trade based
- practical and realistic
- demand driven with incremental expansion
- Internet based, with extensions to popular media and the small farmers.

The Internet Website should:

- include a variety of information on regional market activities
- post bids and offers of commodities or services on the Website
- link buyers and sellers of commodities
- be managed by technically competent personnel
- require low maintenance
- be user friendly so new users of the Internet will be able to access and use the system
- be free to all users at the entry level and for most services
- attract advertisers to support the system
- be based on easily accessible and reliable sources of information.

The Website should be hosted by:

- a primary player in the commodity sector, while avoiding conflicts of interest
- a market participant having ready access to price discovery information
- a market participant that can support negative cash flows over an extended period
- an entity that is linked to regional and international markets; and be
- in a location that has the required human and technical resources to maintain the system.

Findings by stakeholder group

Below is a summary by the stakeholder group of the findings in all 4 countries covered in the needs/capacity assessment phase of the RCIS project. The following represents a distillation of the needs (and in some cases, contributions) that were expressed by each group.

Commodity buyers and sellers

- Where to buy and sell efficiently (best prices, availability of buyers and/or sellers).
- Where to source agricultural inputs (seeds, fertilizers, pesticides, baby chicks, etc.).
- Elimination of some middlemen (prices to the farmer rise as middlemen are eliminated).
- Help in finding transportation sources and costs (Is it worth it to take my product to a remote location for a higher price?).

Processors

- Where to buy product efficiently?
- Elimination of some middlemen.
- Market identification for by-products (i.e., animal feed).
- Willing to pay for and advertise on a reliable information service.

Farmers, cooperatives, associations

- Need timely information on prices, quantity, and quality.
- Where are alternative markets (where to sell)?
- Who are the best input providers (where to buy)? This includes information on and availability of the latest technology in seeds, insecticides, etc.
- How can I establish good long-term trade linkages to sell my products?
- What are the transportation sources and costs?
- Willing to subscribe to a viable information service.

International organizations

Need information on:

- Planting times and quantities.
- Reliable trade-point information. If I need to buy additional grain, where can I get it?
- Do I have to import it or is it available in another region of the country, or in the region?
- Harvest forecasts. Will we have a shortage?
- Commodity availability by country.

Willing to furnish information to RCTIS on:

- prices
- volumes
- transportation costs.

Transporters

- What are the customs requirements? Have they changed? Will I have the right papers with me when I reach the border?
- Where can I get backhaul loads? I don't want to bring my trucks back empty. If I could find farmers who need to transport goods, I could give them a better price and still make money.
- What are the current road conditions? Bad roads take miles and years off my trucks; can I find an alternative route? Are there any bridges out?
- Willing to provide point-to-point-trucking rates.
- Willing to advertise on an active and reliable information system.

News media

- Willing to broadcast and print market information on commodity prices. In some cases this service would be provided free; in other cases the charges seemed excessive.
- WorldSpace digital radio service is coming via the AfriStar satellite. Initially it will be expensive, requiring a special radio receiver; however it has the potential to provide a great deal of timely information on regional (and worldwide) crops.

Internet service providers (ISPs)

The number of ISPs and the approximate subscription charges by country:

- Ethiopia (1)—$250/month—only in Addis.
- Kenya (15)—$135/month.
- Uganda (2)—$65/month.
- Tanzania (8)—$50/month.

Government organizations

- There are many enumerators in the field. Since liberalization, funding has been severely reduced; many enumerators cannot get out to the rural farmers or villages. The information they submit is based on unreliable and therefore inaccurate data.
- Almost everyone in each country was adamant about the inaccuracy of the information published by the Ministry of Agriculture. The only exception was Tanzania, where some people thought the published prices were "not too bad".
- In Ethiopia many traders were not willing to cooperate with any type of information service if the government was to be involved. However, a proposal for "trade points" throughout the country may improve information gathering and sharing in the future.

Information technology capability ratings

As a result of interviewing numerous ISP operators, it was determined that Kenya had the greatest information service capabilities, in human resources and technical infrastructure. The others were ranked in descending order:

1. Kenya
2. Uganda
3. Tanzania
4. Ethiopia.

Note: *It became very evident from interviews across the commodity stakeholder groups in all four countries that the most pressing need was for trade linkages—where to buy and sell the products. Hence the name change of the proposed system from regional commodity information system (RCIS) to regional commodity trade information system (RCTIS).*